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B & S	Bailey & Swinfen
C & H	Chapman & Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver & Boyd
OUP	Oxford University Press
R & K P	Routledge & Kegan Paul
ULP	University of London Press

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3 SOCIAL SCIENCES

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The structure of British industry: a symposium; vol. 2. CUP, 1958. xiii,499pp., tables, diagrs., bibliog. 50*s*. *National Institute of Economic and Social Research, Economic and Social Studies XV*. *C*

INTERNATIONAL COTTON CONFERENCE, 1957 5
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539.1 Nuclear physics

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A clear, comprehensive, and authoritative account of the present position in neutrino physics. There is a particularly full and well-illustrated account of numerous relevant experimental studies, especially those relating to beta decay. The theoretical background is discussed as far as it is relevant to an understanding of experiments. *B*

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ENGSTRÖM, A. *and others* 24

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An account of research carried out by Swedish workers on radiation hazard presented by strontium 90, with a study of the mineral salts and their distribution in bone. Excellent radioautographs and lists of references, and a mathematical approach to the dose rate distribution. *B*

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Physics and mathematics; series 1, vol. 2, ed. by D. J. Hughes, J. E. Sanders, and J. Horowitz. London, [etc.], Los Angeles, Pergamon P., 1958. vii,375pp., plates, tables, diagrs., bibliogs. 90*s*. or $14. *Progress in nuclear energy, series 1.*

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Radioactivity measuring instruments: a guide to their construction and use. London, [etc.], Toronto, Heinemann. 1958. viii,76pp., tables, diagrs., bibliog. 10*s*. 6*d*.

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Nuclear reactor metallurgy. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. ix,382pp., illus., tables, diagrs., bibliog. $5.60 or 42*s*.

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54 CHEMISTRY

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The pentaerythritols, by E. Berlow, R. H. Barth, J. E. Snow. N.Y., Reinhold; London, C & H, 1958. vii,317pp., tables, diagrs., bibliogs. $10 or 80*s*. *American Chemical Society monograph series.*

A comprehensive review of the preparation, properties, and use of pentaerythritol and its polymers. *C*

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Metallurgical thermochemistry. 3rd ed. London, N.Y., [etc.], Pergamon P., 1958. xiv,426pp., tables, diagrs., bibliog. 63*s*. or $10. *International series of monographs on metal physics and physical metallurgy, vol. 1, ed. by G. V. Raynor.*

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An introduction to physical chemistry. EUP, 1958. [14],170pp., illus., tables, diagrs. 12*s*. 6*d*.

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621.3 Electrical engineering

BECK, A. H. W. 38
Space-charge waves and slow electromagnetic waves. London, N.Y., [etc.], Pergamon P., 1958. xi,396pp., tables, diagrs., bibliog. 90*s*. or $15. *International series of monographs on electronics and instrumentation, vol. 8; gen. eds. D. W. Fry and W. A. Higinbotham.*

Up-to-date and unified treatment of small-signal operation of microwave devices for research students and electronic engineers. *B*

BENSON, F. A. 39
Problems in electronics with solutions. Spon, 1958. x,219pp., tables, diagrs. 36*s*.

Three-fifths of the book gives methods of doing the problems. This should prove invaluable to the student studying by himself and to those who have difficulty in applying theoretical training to practical problems. *C*

BRIGGS, G. A. 40
Loudspeakers. 5th ed.; technical ed. R. E. Cooke. Bradford (Yorks.), Wharfedale Wireless Works, 1958. 336pp., illus., tables, diagrs. 19*s*. 6*d*.

First ed. 1948. An easy-to-read book giving both history and practice of loudspeaker design by an author well versed in his subject. *A–B*

P15772

BIONDI, F. J., *ed.* 41
Transistor technology; vols. 2 and 3. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. Illus., tables, diagrs., bibliog. *Bell telephone laboratories series.*

Vol. 2. xiii,701pp. $17.50 or 131*s.* 6*d.* Vol. 3. xiii,416pp. $12.50 or 94*s.* Vol. 2 deals with technology of materials, with special reference to silicon, and principles of transistor design. Volume 3 deals with the preparation of junction structures, production technology, measurements and characterization, and transistor reliability. Intended for research engineers and university students. *B–C*

BRITISH STANDARDS INSTITUTION 42
Semi-enclosed electric fuses: ratings up to 200 amperes and 250 volts to earth. The Institution, 1958. 44pp., tables, diagrs. 8*s.* 6*d.* *British Standards specification; B.S.3036:1958.* *C*

BUCKINGHAM, H. *and* PRICE, E. M. 43
Principles of electronics. 2nd ed. Cleaver-Hume, 1958. 419pp., diagrs. 17*s.* 6*d.* *Cleaver-Hume electrical series, no. 9; gen. ed. H. Cotton.*

First ed. 1953. Additional chapters covering magnetic amplifiers and transistors and some minor revision of original text. *B*

CARR, C. C. 44
Electric machinery: a co-ordinated presentation of A.C. and D.C. machines. N.Y., Wiley; London, C & H, 1958. x,538pp., illus., tables, diagrs. $9.25 or 74*s.*

Principles, design, and performance of rotating machines and transformers. Energy conversion is the central feature and all else develops therefrom. *B*

SIMANE, C. 45
Accelerators of ions and electrons: principles and basic calculations of linear and circular accelerators; tr. from the Czech by C. Mayer and A. G. Evans. Prague, Artia; London, Constable, 1958. 192pp., illus., tables, diagrs., bibliog. 16*s.*

The first comprehensive text on the principles and design of linear and circular particle accelerators; for designers, research workers, and students of physics. *B*

622 Mining

INTERNATIONAL MINERAL DRESSING CONGRESS 46
Progress in mineral dressing: transactions of the Congress, Stockholm 1957, sponsored and ed. by Svenska Gruvforeningen and Jernkontoret. Stockholm, Almquist, 1958. 754pp., illus., tables, diagrs., bibliogs. 95 *Kr.* or 127*s.* 6*d.*

Contains much interesting material by well-qualified authors and merits careful study by those concerned with this field. *C*

66 CHEMICAL TECHNOLOGY

AITCHISON, L. *and* PUMPHREY, W. I. 47
Using steel wisely: a dissertation on the principles underlying the selection of the correct steel for any engineering application. Macdonald & Evans, 1958. xxii,241pp., illus., tables, diagrs. 44*s.*

Valuable for the engineer. Covers the metallurgical principles involved in the production of wrought steels from ingot, and the metallurgical background to steel selection. *B–C*

ELECTROCHEMICAL SOCIETY 48

Technology of columbium (niobium): papers presented at the symposium on columbium (niobium) of the Electrothermics and Metallurgy Division of the Electrochemical Society, May 15 and 16, 1958, Washington, D.C., ed. by B. W. Gonser and E. M. Sherwood. N.Y., Wiley; London, C & H, 1958. viii,120pp., illus., tables, diagrs., bibliog. $7 or 56*s*.

The papers make a useful contribution to the rapidly expanding literature on niobium, one of the metallic materials which are suitable for service at high temperature and for use in atomic plant. *C*

GREAT BRITAIN. *Ministry of Power* 49

The efficient use of fuel: a textbook on fuels and their efficient utilization for the use of students and technical men in industry. 2nd ed. HMSO, 1958. vii,888pp., tables, diagrs., bibliog. 35*s*.

First ed. 1944. Completely revised edition of a textbook dealing mainly with coal and oil technology produced by the Ministry of Fuel and Power. Written by a team of experts for the student engineer and chemist. *B*

50

FLAVOUR research and food acceptance: a survey of the scope of flavour and associated research, compiled from papers presented in a series of symposia given in 1956–57, sponsored by Arthur D. Little Inc. N.Y., Reinhold; London, C & H, 1958. vi,392pp., illus., tables, diagrs., bibliog. $10 or 80*s*.

A most important book for all interested in the organoleptic assessment of foods. *C*

MERRIMAN, A. D. 51

A dictionary of metallurgy. Macdonald & Evans, 1958. xv,402pp., illus., tables, diagrs. 126*s*.

A dictionary of metallurgical terms, processes, materials, etc. which, although of insufficient detail to assist the metallurgist greatly, should be of interest to other technologists and scientists. *D*

MUGELE, G. F. *and* WISEMAN, A. 52

Water treatment. Newnes, 1958. x,142pp., plates, diagrs., bibliog. 21*s*. *Newnes technical surveys.*

A useful textbook on the modern methods of water purification and treatment. Should prove of great value to water engineers, industrialists, and public health workers. *B*

NATIONAL INSTITUTE OF DRYCLEANING 53

Drycleaning: technology and theory; a report, ed. by A. R. Martin and G. P. Fulton. N.Y., Textile Book Service, 1958. viii,269pp., illus. $6.

Monograph with 255 references. *B–C*

54

PERKIN centenary, London: 100 years of synthetic dyestuffs. Pergamon P., 1958. xii,136pp., plates, diagrs. 42*s*. *Tetrahedron, supplements no. 1.*

A collection of four lectures on the life of W. H. Perkin and the influence of his work on the dyestuff industry and on developments in organic chemistry. *A*

REGNER, A. 55

Electrochemical processes in chemical industries; tr. from the Czech by K. Kutil, J. Wiener, and A. G. Evans. Prague, Artia, 1957; London, Constable, 1958. 464pp., tables, diagrs., bibliog. 30*s*.

This excellent advanced text translated from the Czech deals thoroughly with the technology of electrolysis. The binding is bad but the content is good. *C–D*

ROSTOKER, W. 56
The metallurgy of vanadium. N.Y., Wiley; London, C & H, 1958. ix,186pp., illus., tables, diagrs., bibliog. $8.50 or 68*s*. *Wiley series on the science and technology of materials, ed. by J. H. Hollomon.*

An up-to-date summary of much information available on the extraction, properties, and technology of vanadium and its alloys; well documented; useful for technologists and advanced students. *C*

67/68 MANUFACTURES

BOWER, C. T. 57
Power tool woodworking. Crosby Lockwood, 1958. xii,204pp., illus., diagrs. 20*s*.

Explains the use of the small portable electric drilling machine, with its kit of accessories, for woodworking in the home workshop. *A*

BRITISH PAPER AND BOARD MAKERS' ASSOCIATION. *Technical Section* 58
Fundamentals of papermaking fibres: transactions of the symposium held at Cambridge, September 1957, ed. by F. Bolam. Kenley (Surrey), the Association, 1958. x,487pp., illus., tables, diagrs. 75*s*. *C*

CLEGG, J. K. 59
Practical cotton carding. Manchester, Columbine P., 1958. vii,123pp., illus., tables, diagrs. 21*s*.

Elementary but practical handbook on a subject on which there is little information in print. *B*

7 FINE ARTS

77 PHOTOGRAPHY

BLAXLAND, J. 60
Photographic processing: basic techniques for the amateur. Newnes, 1958. vii, 168pp., illus., diagrs. 18*s*.

A very practical handbook aimed at providing the beginner with a good dark-room technique. *A*

ILFORD LTD 61
The Ilford manual of photography. 5th ed., ed. by A. Horder. Ilford (Essex), Ilford, 1958. [8],725pp., illus., tables, diagrs., bibliog. 30*s*.

Revised with considerable rewriting. Colour photography is excluded. *B*

9 GEOGRAPHY. BIOGRAPHY. HISTORY

92 BIOGRAPHY

MANSON, G. C. 62
Frank Lloyd Wright to 1910: the first golden age, with a foreword by Henry-Russell Hitchcock. N.Y., Reinhold; London, C & H, 1958. x,228pp., illus. $10 or 80*s*.

Elaborate biography. *B*

ROLT, L. T. C. 63
Thomas Telford. London, [etc.], Longmans Green, 1958. xv,211pp., plates, diagrs., bibliog. 25*s*.

The life and works of a great engineer, his genius and courage in constructing canals, roads, and bridges in profusion, often opposed by nature and man combined. Inspiring reading. *A*

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THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY 64
Nomenclature of organic chemistry, 1957. Butterworths, 1958. vi,92pp., tables, diagrs., bibliog. 15*s*.

The official presentation of the IUPAC rules of 1957 for the nomenclature of hydrocarbons and of fundamental heterocyclic systems is clearly presented and subdivided, also well indexed. *D*

001.8 Methodology

BLICKLE, M. D. *and* HOUP, K. W. 65
Reports for science and industry. N.Y., Henry Holt, 1958. x,320pp., tables, diagrs. $4.75. *A*

HENDRICKSON, J. R. 66
The research paper. N.Y., Henry Holt, 1958. xvi,76pp. $1.35.

Instructions for preparing a research paper. *B*

3 SOCIAL SCIENCES
31 STATISTICS

FRANCIS, R. G., *ed.* 67
The population ahead. Minneapolis, Univ. of Minnesota; London, Bombay, [etc.], OUP; Toronto, Thomas Allen, 1958. x,160pp., tables, maps, diagrs. $3.75 or 30*s*.

In this symposium the concept of the 'optimum population' is discussed by contributors who include a geographer, a botanist, and a biologist, as well as specialists in the social sciences. *B*

SHELDON, H. D. 68
The older population of the United States: with introductory and summary chapters by C. Tibbitts. N.Y., Wiley; London, C & H, 1958. xiii,223pp., tables, diagrs. $6 or 48*s*. *Census monographs.*

A consideration of the number and social position of older people revealed by the 1950 census. Occupational status, housing, living arrangements, and incomes are discussed and the relevant census material given. *C*

TAEUBER, I. B. 69
The population of Japan. Princeton (N.J.), Princeton University P.; [London, OUP], 1958. xx,462pp., illus., tables, diagrs., bibliog. $15 or 120*s*.

An analysis of Japanese demography in its socio-economic context from legendary times but with special reference to the period 1920–1955. Contains a glossary and extensive bibliography. *C*

5 NATURAL SCIENCES
52 ASTRONOMY

THIEL, R. 70
And there was light: the discovery of the universe; tr. from the German by R. and C. Winston. André Deutsch, 1958. xiv,395pp., illus., plates, tables, diagrs. 25*s*.

A very readable history of astronomy in which full consideration is given to the world background and to the personal characters of the astronomers. *A*

53 PHYSICS

EISENSCHITZ, R. 71
Statistical theory of irreversible processes. OUP, 1958. viii,84pp., bibliog. 8*s*. 6*d*. *Oxford library of the physical sciences, ed. by B. Bleaney and others.*

An advanced textbook giving results of recent research on theory of viscosity and thermal conductivity. *C*

KITTEL, C. 72
Elementary statistical physics. N.Y., Wiley; London, C & H, 1958. xi,228pp., tables, diagrs., bibliog. $8 or 64*s*.

A clearly written, concise presentation based on a course for physics students at Berkeley, U.S.A. The approach is by Gibbs method. A remarkably wide range of topics and applications is discussed. *B*

RUECHARDT, E. 73
Light: visible and invisible. Michigan, University of Michigan P., 1958. 201pp., illus., diagrs. $4.50. *Ann Arbor science library.*

Translation of the second ed. of a German text presenting an elementary and non-mathematical account of optics and the properties of light. Lucidly written with numerous line drawings and photographs of an exceptionally high standard. *A*

57 BIOLOGY

DARWIN, C. 74
The living thoughts of Darwin: presented in a new and revised edition and with a preface by Julian Huxley, assisted by James Fisher. Cassell, 1958. viii,156pp., plate, bibliog. 15*s*.

A series of extracts from Darwin's works linked with a lucid and concise commentary relating them to modern biological thought. *A–B*

ELSASSER, W. M. 75
The physical foundation of biology: an analytical study. London, [etc.], Los Angeles, Pergamon P., 1958. x,219pp., diagrs., bibliog. 30*s*. or $4.75.

A non-technical introduction to cybernetics and information theory. Considers some philosophical implications, especially in respect of analogies with the nervous system. *A*

MOORE, H. B. 76
Marine ecology. N.Y., Wiley; London, C & H, 1958. xi,493pp., illus., tables, diagrs., bibliog. $9.50 or 76*s*.

An attempt to bring together the divergent disciplines of plankton, fisheries, the deep-sea, shallow-water communities, and the shore. Copiously illustrated with an extensive but already outdated bibliography. *B*

RUSH, J. H. 77
The dawn of life. EUP, 1958. 258pp., diagrs. 15*s*.

A far-ranging review of the impact of modern research on the question of the origin of the world, and of life, written primarily for the intelligent layman and scientist. *A*

SOCIETY FOR EXPERIMENTAL BIOLOGY 78
The biological replication of macromolecules: symposium, 12th, Aberystwyth 1956, [ed. by F. K. Sanders]. Cambridge, CUP for the Society, 1958. vi,255pp., plates, tables, diagrs., bibliog. 50*s*. *C*

SYMPOSIUM ON INFORMATION THEORY IN BIOLOGY 79
Symposium on information theory in biology: Gatlinburg, Tennessee, October 29–31, 1956, ed. by H. P. Yockey, with the assistance of R. L. Platzman and H. Quastler. London, N.Y., [etc.], Symposium Publs. Div. Pergamon P., 1958. xii,418pp., plates, tables, diagrs., bibliog. 80*s*. or $12.

This broadly based symposium gives a clear account of the basic methods of this new approach to biological problems, together with a full and frank appraisal of its merits and limitations as revealed by work up to 1956. *C*

577.1 Biochemistry

YOUNG, L. *and* MAW, G. A. 80
The metabolism of sulphur compounds. London, Methuen; N.Y., Wiley, 1958. 180pp., diagrs., bibliog. 16*s*. *Methuens monographs on biochemical subjects, ed. by Sir R. Peters and F. G. Young.*

Comprehensive review of status of research in its field. *C*

58 BOTANY

DANDY, J. E., *comp.* 81
List of British vascular plants; prep. by J. E. Dandy for the British Museum (Natural History) and the Botanical Society of the British Isles, incorporating the *London catalogue of British plants*. British Museum (Natural History), 1958. xvi,176pp. 10*s*. (interleaved copies 15*s*.) *D*

JØRGENSEN, C. A. *and others* 82
Flowering plants of Greenland: a taxonomical and cytological survey, by C. A. Jørgensen, T. Sørensen and M. Westergaard. Copenhagen, Munksgaard, 1958. 172pp., illus. 27*kr*. *Danske videnskabernes selskab. Biologiske skrifter, bd 9, nr 4.*

A revised list of the flowering plants of Greenland with cytotaxonomical comments. The authors have counted the chromosome numbers of 237 species. *B*

LEWIS, P. 83
British wild flowers: introduction and key to genera by R. D. Meikle; colour illus. by A. V. Webster; text illus. by L. M. Ripley. Eyre & Spottiswoode, 1958. 376pp., illus., plates, bibliog. 25*s*. *Kew series.* *A*

MEIKLE, R. D. 84
British trees and shrubs; colour illus. by A. V. Webster; text illus. by E. V. Petts. Eyre & Spottiswoode, 1958. 244pp., illus., plates, bibliog. 25*s*. *Kew series.* *A*

59 ZOOLOGY

BRISTOWE, W. S. 85
The world of spiders. Collins, 1958. xiii,304pp., illus., plates, bibliog. 30*s*. *New naturalist series, ed. by J. Fisher and others, no. 38.*

Important new work on spiders by an author who has done more than any other to make their habits known. Fine line and wash illustrations and photographs. *A*

COLLENETTE, C. L. 86
Lymantriidae. British Museum (Natural History), 1958. [1],69–76pp. 2*s*. *Ruwenzori Expedition, 1952: reports, vol. 1, no. 5.* *B–C*

EVANS, G. O. *and* FLETCHER, D. S. 87
Ruwenzori expedition, 1952: introduction with list of localities. British Museum (Natural History), 1958. [1]viipp., plates. 2*s*. 6*d*. *Ruwenzori Expedition, 1952: reports, vol. 1, no. 1.* *B–C*

FLETCHER, D. S. 88
Arctiidae, nolinae. British Museum (Natural History), 1958. [1],55–68pp., illus. 3*s*. *Ruwenzori Expedition, 1952: reports, vol. 1, no. 4.* *B–C*

FLETCHER, D. S. 89
Geometridae. British Museum (Natural History), 1958. [1],77–176pp., illus., table, bibliog. 21*s*. *Ruwenzori Expedition, 1952: reports, vol. 1, no. 6.* *B–C*

KIRIAKOFF, S. G. 90
Arctiidae (except nolinae), thyretidae and notodontidae. British Museum (Natural History), 1958. [1],1–54pp., illus. 10*s*. 6*d*. *Ruwenzori Expedition, 1952: reports, vol. 1, nos. 2–3.* *B–C*

6 APPLIED SCIENCES

61 MEDICAL SCIENCES

91
RETAIL pharmacist's handbook; ed. H. G. Moss. Newnes, 1958. xv,464pp., illus., plates, tables, diagrs. 45*s*.

Of most use to the pharmacist setting up in retail business. Covers all aspects of the organization and administration of a shop: fittings, layout, heating, lighting, staff, etc. Well illustrated and includes a list of synonyms and trade names. *B*

SYKES, G. 92
Disinfection and sterilization. Spon, 1958. xviii,397pp., plates, tables, diagrs., bibliog. 75*s*. *General and industrial chemistry series, ed. by H. M. Bunbury.*

Comprehensive textbook with the most up-to-date information on these important subjects, written by a leading expert in this field. A useful reference book for those concerned with bacteriology, public health, and allied sciences. *B–C*

62 ENGINEERING

RUBEY, H. *and others* 93
Engineering surveys: elementary and applied, by H. Rubey, G. E. Lommel, M. W. Todd. 2nd ed., enl. N.Y., [London], Macmillan (N.Y.), 1958. xxii,[940], various pageing, illus., tables, diagrs. $6.75 or 47*s*. 6*d*. *Engineering science series.*

An excellent textbook for students taking up the study of surveying. Published in the U.S.A. and originally intended for use in that country. Previous ed. 1942. *B*

621 Mechanical engineering

GRABBE, E. M. *and others, eds.* 94
Handbook of automation, computation, and control; vol. 1, control fundamentals, ed. by E. M. Grabbe, S. Ramo, and D. E. Wooldridge. N.Y., Wiley; London, C & H, 1958. Various pageing, tables, diagrs., bibliogs. $17 or 136*s*.

Theory and fundamental mathematics of control systems for practising engineers. Additional chapters on numerical analysis, operations research, and information theory. *B*

HORLOCK, J. H. 95
Axial flow compressors: fluid mechanics and thermodynamics. Butterworths, 1958. xvi,190pp., plates, tables, diagrs., bibliogs. 40*s*.

For the graduate engineer studying the behaviour of axial-flow compressors under varying conditions of mass air flow. *C*

NECHLEBA, M. 96
Hydraulic turbines: their design and equipment; tr. from the Czech by C. Mayer and A. G. Evans. Prague, Artia; London, Constable, 1958. 636pp., illus., tables, diagrs., bibliog. 45*s*.

Treatise on design of hydraulic turbines (Francis, Kaplan, and Pelton), with full treatment of turbine controls and accessories. Includes interesting examples of Czechoslovakian practice. For designers and advanced students. *B*

621.039 Nuclear engineering

FEDERATION OF BRITISH INDUSTRIES 97
Report of the F.B.I. conference on nuclear energy held at Eastbourne, 10–12 April, 1958. The Federation, 1958. vii,188pp., illus., tables, diagrs. 15*s*.

Industrial, economic, and technical aspects of the application of atomic energy. *B*

621.3 Electrical engineering

KLEWE, H. R. J. 98
Interference between power systems and telecommunication lines; with a foreword by Sir G. Radley. Edward Arnold, 1958. viii,256pp., plates, tables, diagrs., bibliog. 70*s*. *British electrical and allied industries research association. Technical reports, no. M/T 126.*

Extended survey of the principles, causes, and amelioration of interference between power and communication circuits. *C*

621.4 Internal combustion and heat engines

COLLINS, S. C. *and* CANNADAY, R. L. 99
Expansion machines for low temperature processes. OUP, 1958. [3],116pp., plates, diagrs., bibliog. 12*s*. 6*d*. *Oxford library of the physical sciences, ed. by B. Bleaney and others.*

A brief account of expansion machines used in refrigeration and gas liquefaction. *C*

JUDGE, A. W. 100
Gas turbines for aircraft. C & H, 1958. vii,440pp., illus., plates, tables, diagrs., bibliog. 60*s*.

Designed to fill the gap between the purely descriptive and the academic approaches. *B–C*

621.7 Workshop practice

MOLLOY, E. 101
Questions and answers on oxy-acetylene welding. Newnes, 1958. viii,120pp., illus., tables, diagrs. 12*s*. 6*d*.

A large amount of practical information is given, grouped under fairly wide headings, supplemented by a well-compiled index. *B–D*

624 Civil engineering

HENDRY, A. W. *and* JAEGER, L. G. 102
The analysis of grid frameworks and related structures. Chatto & Windus, 1958. 308pp., tables, diagrs. 50*s*.

A book for the advanced student and designer giving an introduction to harmonic and basic function analysis and its application to grid frameworks such as bridge decks. *C*

628 Public Health engineering

MCCABE, J. *and* ECKENFELDER, W. W., *eds.* 103
Biological treatment of sewage and industrial wastes: vol. 2, anaerobic digestion and solids-liquid separation; papers presented at the conference on anaerobic digestion and solids handling, sponsored by Manhattan College, N.Y., April 24–26, 1957. N.Y., Reinhold; London, C & H, 1958. vi,330pp., illus., tables, diagrs., bibliog. $11.50 or 92*s*. *C*

SADDINGTON, K. *and* TEMPLETON, W. L. 104
Disposal of radioactive waste, with a foreword by J. C. C. Stewart. Newnes, 1958. x,102pp., plates, tables, diagrs., bibliog. 17*s*. 6*d*. *Newnes technical survey.*
Introductory but authoritative text based mainly on English practice. *B*

THRESH, J. C. *and others* 105
The examination of waters and water supplies, [by] Thresh, Beale, and Suckling. 7th ed. by E. W. Taylor. Churchill, 1958. viii,841pp., plates, tables, diagrs., bibliog. 100*s*.
Previous ed. 1949. Standard British book on the subject. New material added to this edition includes a chapter on radioactivity in water. *C*

629.13 Aeronautical engineering

BERKNER, L. V., *ed.* 106
Manual on rockets and satellites, ed. by L. V. Berkner; associate eds. G. Reid, J. Hanessian, and L. Cormier. London, N.Y., Paris, Pergamon P., 1958. xx,508pp., plates, tables, diagrs., bibliog. 160*s*. or $25. *Annals of the international geophysical year 1957–1958, vol. 6.*
Collection of papers describing the investigations and techniques associated with the programme of the International Geophysical Year. *C*

NORTH ATLANTIC TREATY ORGANIZATION 107
Air intake problems in supersonic propulsion: invited papers presented at the 11th Agard Combustion and Propulsion Panel meeting, Paris, December 1956, ed. by J. Fabri. Pergamon P. for Advisory group of aeronautical research and development NATO, 1958. xx,82pp., plates, tables, diagrs., bibliogs. 30*s*. or $4.50. *Agardograph 27.*
Four research scientists who have long specialized in the theory of fluid dynamics applicable to turbojet engines each review theoretically the most efficient air intake system. *C*

ZUCROW, M. J. 108
Aircraft and missile propulsion; vol. 1. N.Y., Wiley; London, C & H, 1958. xiv,538pp., illus., tables, diagrs., bibliog. $11.50 or 92*s*.
First of a series of three books dealing with the principles of aircraft and missile propulsion. This volume covers the thermodynamics of fluid flow and its application. *C*

629.19 Astronautics

UNITED STATES. Air Force Office of Scientific Research 109
Vistas in astronautics: first annual Air Force Office of Scientific Research Astronautics Symposium (co-sponsored with Convair division, General Dynamics Corporation); eds. M. Alperin, M. Stern, co-ordinating ed. H. Wooster. London, [etc.], Pergamon P., 1958. xxi,330pp., illus., plate, tables, diagrs., bibliog. 105*s*. or $15. *International series of monographs on aeronautical science and space flight. Division 7: Astronautics division, vol. 1.*
Papers presented at the symposium, held at San Diego, in February 1957, arranged under six headings: re-entry, tracking and communications, environment and measurements, propulsion, orbits, and human factors. *C*

63 AGRICULTURE

636 Livestock

LERNER, I. M. 110
The genetic basis of selection. N.Y., Wiley; London, C & H, 1958. xviii,298pp., tables, diagrs., bibliog. $8 or 64*s*.

Designed primarily for students with an advanced knowledge of genetics but no extensive statistical background. The emphasis is on artificial selection as exemplified by experimental data on the domestic fowl. *C*

64 DOMESTIC SCIENCE

CORLETT, W. J. 111
The economic development of detergents. Duckworth, 1958. 208pp., tables. 25*s*. *Industrial innovation series.*

Provides a historical, technological, and economic review of soap and detergent industries, which is not only an invaluable reference work for those engaged in the industry, but also provides a fascinating and readable review of this subject. *C*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS.

ROTHSTEIN, J. 112
Communication, organization and science, with a foreword by C. A. Muses. Indian Hills, Falcon's Wing P., 1958. xcvi,110pp., diagrs. $3.50. *A*

655 Printing, publishing, book trade

DAHL, S. 113
History of the book. N.Y., Scarecrow P., 1958. vi,279pp., illus., plates. $6.

A series of lectures given in the early 1920s considerably expanded to include the results of recent research. *B*

JENNETT, S. 114
Pioneers in printing: Johann Gutenberg, William Caxton, William Caslon, John Baskerville, Alois Senefelder, Frederick Koenig, Ottmar Mergenthaler, Tolbert Lanston. R & KP, 1958. xi,196pp., illus. 25*s*. *B*

656 Transport

INTERNATIONAL CARGO HANDLING CO-ORDINATION ASSOCIATION 115
Progress in cargo handling; vol. 2, Hamburg, 1957; reports of papers and discussions, general technical conference. Iliffe, 1958. xii,306pp., illus., tables, diagrs. 63*s*. *A–C*

KENT, J. L. 116
Ships in rough water. Nelson, 1958. xiv,288pp., tables, diagrs. bibliog. 32*s*. 6*d*. *Nelson's nautical series, ed. by A. C. Hardy.*

This book deals with ocean weather, the rotational and translational movements of a ship in a seaway, and ship propulsion in rough weather conditions. The mathematical treatment is based on practical experience. *B*

659 Publicity. Information

NAFZIGER, R. O. *and* WHITE, D. M., *eds.* 117
Introduction to mass communications research. Baton Rouge, State University P., 1958. ix,244pp. $5. *A*

67/68 MANUFACTURES

BROWN, N. C. *and* BETHEL, J. S. 118
Lumber. 2nd ed. N.Y., Wiley; London, C & H, 1958. xvi,379pp., illus., plate, tables, diagrs. 72*s*.

Previous ed. 1947 by N. C. Brown. *B*

SMITH, W. M. 119
Vinyl resins. N.Y., Reinhold; London, C & H, 1958. ix,282pp., illus., tables, diagrs. $5.75 or 46*s*. *Plastics application series; Pilot books.*

A semi-technical condensation of information on the properties, fabrication, and applications of a versatile group of plastics. Will be useful to plastics manufacturers and others seeking new raw materials. *B*

THORNTON, J. H., *ed.* 120
Textbook of footwear manufacture. 2nd ed. National Trade P., 1958. xii,588pp., illus., diagrs., bibliog. 45*s*.

Enlarged edition of a comprehensive work on the theory and practice of boot and shoe design and manufacture. Profusely illustrated with diagrams and photographs. *B*

681 Precision Mechanisms

LLOYD, H. A. 121
Some outstanding clocks over seven hundred years, 1250–1950. Leonard Hill, 1958. xx,160pp., plates, diagrs. 70*s*.

Deals mainly with the mechanical, astronomical, and scientific aspects of clocks, including many continental clocks not previously described in English. Strongly recommended for the horological specialist. *C*

69 BUILDING

ALUMINIUM DEVELOPMENT ASSOCIATION 122
Aluminium windows. The Association, 1958. 59pp., illus., tables. 10*s*. 6*d*.

Types and advantages of aluminium windows with examples of their use. Methods of fixing and finishing are also covered. *B*

BARRY, R. 123
The construction of buildings; vol. 1, foundation, walls, floors and roofs. Crosby Lockwood, 1958. iv,124pp., diagrs. 18*s*.

Intended for the first year student. Deals with methods of construction in smaller buildings. Well written and well illustrated with many diagrams. *B*

CRITCHELL, P. L. 124
Joints and cracks in concrete. Contractors Record, 1958. 232pp., illus., tables, diagrs., bibliog. 40*s*. *Concrete library; advisory ed. J. Singleton-Green.*

Excellently illustrated book describing correct jointing techniques to obviate cracking caused by structural movements, for designers and constructors of large concrete structures, and advanced students. *C*

ELVERY, R. H. 125
Concrete practice; vol. 1. Contractors Record, 1958. viii,214pp., illus., tables, diagrs. 28*s*. *Concrete library; advisory ed. J. Singleton-Green.*

Simple but sound practical account of modern methods of making, placing, and testing concrete for City and Guilds students, craftsmen, clerks of works, supervisors. *A–B*

MORGAN, W. 126
Elementary reinforced concrete design for students of architecture, building, and engineering. 2nd ed. Edward Arnold, 1958. viii,408pp., tables, diagrs. 28*s*.

Textbook based on the B.S. Code of practice CP.114 (1957). General structural mechanics are also dealt with. *B*

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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01 BIBLIOGRAPHY

GREAT BRITAIN. Department of Scientific and Industrial Research 127
Crushing and grinding: a bibliography. HMSO, 1958. ix,425pp., illus., diagrs. 35*s*.

Approximately 2800 references with abstracts covering all aspects of the subject. A series of short reviews of the literature of the theory and applications, and author and subject indexes are included. *D*

HAWKINS, R. R., *ed.* 128
Scientific, medical, and technical books published in the United States of America: a selected list of titles in print with annotations. 2nd ed., books published to December 1956. Prep. under the direction of the National Academy of Sciences—National Research Council's committee on bibliography of American scientific and technical books. Washington, the Council, 1958. xii,1491pp. $20.

Following exactly the pattern of the earlier edition, this valuable source-book is intended to list the books that would be available in a well-stocked American library with an active collection in the appropriate subjects. It is limited to U.S. publications by U.S. and Canadian authors. *D*

LONDON UNIVERSITY. London School of Economics and Political Science. 129
British Library of Political and Economic Science
A London bibliography of the social sciences; vol. X, 1950–55, A–K. The Library, 1958. xi,1099pp. 100*s*. *Studies in economics and political science.* *D*

3 SOCIAL SCIENCES

33 ECONOMICS

130
BRITAIN, the Commonwealth and European free trade; prep. by the Economist Intelligence Unit Ltd. Britain in Europe, 1958. 40pp., tables, diagrs. 5*s*.

This pamphlet, while complete in itself, is complementary to *Britain in Europe* issued in 1957. It gives a useful survey of Commonwealth trade and shows how a free-trade area which included Great Britain would be likely to affect Commonwealth trading. *A*

GALBRAITH, J. K. 131
The affluent society. Hamish Hamilton, 1958. xii,288pp. 21*s*.

Economic theory. *A*

PRYOR, E. J. 132
Economics for the mineral engineer. London, [etc.], Los Angeles, Pergamon P., 1958. 254pp., plates, tables, diagrs., bibliog. 35*s*. or $6.

After outlining certain mining practices the author discusses management structures and applies general factors to the economics of mineral beneficiation. *A*

331 Industrial relations

HUNTER, D. 133
Health in industry. Penguin, 1959. 288pp., plates, diagrs., bibliog. 4*s*. *Pelican medical series.*

A comprehensive well-illustrated publication intended mainly as a 'popular' introduction to industrial hazards. It should nevertheless find its rightful place on the bookshelf of every industrial medical officer, welfare and safety precaution officer, etc., and appeal to the student public as well. *A–B*

37 EDUCATION

ASHBY, *Sir* E. 134
Technology and the academics. Macmillan, 1958. vii,118pp. 15*s*.

History of relations between science and the universities. *A*

FLEMING, C. M. 135
Teaching: a psychological analysis. Methuen, 1958. xiii,291pp., tables, diagrs., bibliog. 28*s*. *Methuens manuals of modern psychology, ed. by C. A. Mace.*

A summary of, and guide to, recent research in educational psychology. *B*

SIMMONS, J. 136
New University. Leicester, Leicester University P., 1958. 233pp., plates, tables. 12*s*. 6*d*.

An account of the development of the University of Leicester. *A*

STRONG, C. F. 137
History in the secondary school. ULP, 1958. 109pp., bibliog. 10*s*. 6*d*.

Methods for use with non-academic pupils. *B*

5 NATURAL SCIENCES

BALLENTYNE, D. W. G. *and* WALKER, L. E. Q. 138
A dictionary of named effects and laws in chemistry, physics, and mathematics. C & H, 1958. v,205pp., diagrs. 30*s*. *D*

HANSON, N. R. 139
Patterns of discovery: an inquiry into the conceptual foundations of science. Cambridge, CUP, 1958. x,241pp., illus., plates, diagrs. 30*s*.

Deals with the philosophical aspects of research and discovery and deserves to be read by every scientist engaged on research work. *C*

HULL, L. W. H. 140
History and philosophy of science: an introduction. London, N.Y., Toronto, Longmans Green, 1959. xii,340pp., plates, diagrs., bibliog. 25*s*.

Gives the humanities student a good introduction to the basic concepts of science and the philosophic issues raised during the advance of knowledge. *A*

51 MATHEMATICS

ASELTINE, J. A. 141
Transform method in linear system analysis. N.Y., [etc.], London, McG-H, 1958. xvi,300pp., tables, diagrs. $8.50 or 66*s*. *Electrical and electronic engineering series, ed. by F. E. Terman and others.*

Covers the application of integral transforms to the analysis of physical systems describable by linear differential equations. Essentially for engineers. *C*

BARTON, A. 142
An introduction to co-ordinate geometry. ULP, 1958. 303pp., diagrs. 21*s*.

This is a sound elementary text on co-ordinate geometry, from the beginnings up to university scholarship standard. Insistence on good method is maintained through well-explained, worked examples, and there is an excellent supply of exercises for the pupil. *B*

FERRAR, W. L. 143
Integral calculus. Oxford, Clarendon P., 1958. [5],276pp., diagrs. 35*s*.

An admirable course, with examples, on the indefinite integral and the Riemann definite integral, double and curvilinear integrals, for mathematicians and scientists in their first two years at university. *B*

MAXWELL, E. A. 144
Co-ordinate geometry: with vectors and tensors. Oxford, Clarendon P., 1958. [8],194pp., illus. 25*s*.

An admirable basic course of three-dimensional co-ordinate geometry, including vector and tensor methods and numerous examples, with answers. Includes the general quadric. *B*

QUENOUILLE, M. H. 145
The fundamentals of statistical reasoning. Griffin, 1958. 169pp., tables, diagrs., bibliogs. 24*s*. *Griffin's statistical monographs and courses, ed. by M. G. Kendall, no. 3.*

This is a very good survey of the basic principles of statistics, achieving brevity while covering much ground by omitting computations and taking a fair amount of mathematics for granted. *B*

ROY, S. N. 146
Some aspects of multivariate analysis. N.Y., Wiley; Calcutta, Indian Statistical Institute, 1957; [London, C & H, 1958]. [6],214pp., bibliog. $8 or 64*s*. *Indian statistical series, no. 1.*

This monograph collects material mainly by the author and his collaborators, drawn from the periodical literature or as yet unpublished. Matrix algebra is the chief tool; some general acquaintance with the elements of multivariate analysis is assumed. *C*

SHALDERS, E. G. 147
Graded examples in mathematics for National Certificate students: with hints and solutions. Books 1, 2, and 3. Blackie, 1958. 5*s*. each.

Book 1, iv,88pp. Book 2, iv,90pp. Book 3, iv,90pp. A useful, carefully graded selection of examples, with answers, ranging from elementary arithmetic to integration and maxima and minima, by a lecturer at Woolwich Polytechnic. *B*

SOMMERVILLE, D. M. Y. 148
Elements of non-Euclidean geometry. N.Y., Dover Publs.; London, Constable, 1958. xvi,274pp., diagrs. $1.50 or 12*s*.

A welcome reprint of the 1914 edition, still of value as perhaps the most readable and simplest introduction to an important topic. *B*

53 PHYSICS

539.1 Nuclear physics

EISENBUD, L. *and* WIGNER, E. P. 149
Nuclear structure. OUP, 1958. viii,128pp., tables, diagrs., bibliog. 25*s*. *Investigations in physics, ed. by E. Wigner and R. Hofstadter, no. 8.*

Descriptive summary of theories of nuclear structure, for physicists and students of atomic physics. *B*

JELLEY, J. V. 150
Čerenkov radiation: and its applications. London, [etc.], Los Angeles, Pergamon P. for U.K.A.E.A., 1958. x,304pp., plates, tables, diagrs., bibliog. 65*s*. or $10.

A very authoritative well-written account which covers not only the basic phenomena and their theoretical interpretation, but also the design and application of Čerenkov counters. Written from an experimentalist point of view. Apart from the theoretical chapters, little mathematical knowledge is required. Of interest to physicists and those concerned with the construction of electronic instruments. *B*

LANDSHOFF, R. K. M., *ed.* 151
The plasma in a magnetic field: a symposium on magnetohydrodynamics. Stanford (Calif.), Stanford University P.; London, OUP, 1958. [6],130pp., illus., tables, diagrs. $4.50 or 36*s*.

Papers are concerned mainly with means for confining hot deuterium plasma long enough to produce controlled thermonuclear power. Intended for research physicists. *C*

SYMPOSIUM ON GLOVE BOX DESIGN AND OPERATION 152
Glove boxes and shielded cells for handling radioactive materials: a record of the proceedings of the symposium on glove box design and operation held in the Cockcroft Hall, A.E.R.E., Harwell, on February 19th to 21st, 1957; sponsored by the United Kingdom Atomic Energy Authority. London, Butterworths; N.Y., Academic P., 1958. xii,515pp., illus., tables, diagrs., bibliog. 95*s*. or $16.80.

About eighty papers on a wide variety of problems arising in the design of radiation-shielded facilities particularly for use with α- and β-emitters, on the experimental and on the production scale. Emphasis is on British practice, though there are some American papers. The book is well edited and will be most valuable to scientists and engineers dealing with facilities for work with radioactive materials. *B–C*

54 CHEMISTRY

ACADEMY OF SCIENCES USSR, DIVISION OF CHEMICAL SCIENCES 153
General questions on electrochemical kinetics and the reaction mechanism of electrochemical reduction: reports of the fourth Soviet conference on electrochemistry, October 1–6, 1956; tr. from the Russian. N.Y., Consultants Bureau, 1958. 90pp. $12.

Russian edition published Moscow, Academy of Sciences USSR P., 1956. Consists of 121 abstracts covering many aspects of the subject. *C*

BLUMENTHAL, W. B. 154
The chemical behaviour of zirconium. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. vi,398pp., tables, diagrs. $11 or 82*s*. 6*d*.

This new comprehensive and systematic treatment of the chemistry of zirconium and its compounds provides a most useful advanced text for technologists and research workers. *C*

CHEMICAL SOCIETY 155
Steric effects in conjugated systems: proceedings of a symposium held at the University, Hull, 15–17 July, 1958, ed. by G. W. Gray. London, Butterworths; N.Y., Academic P., 1958. viii,181pp., tables, diagrs. 30*s*. or $6.50.

Fifteen papers and discussion. Many papers by well-known authorities. Topics covered range from pure theory to the description and discussion of physical and chemical effects produced by certain substituents or structural features in aromatic compounds, indicating that they tend to behave like conjugated systems. For research workers and third-year students in organic chemistry. *B*

156
CHEMISTRY of the co-ordinate compounds: a symposium sponsored by the Italian National Research Council, the International Union of Pure and Applied Chemistry, and the Italian Chemical Society, Rome, 15–21 September 1957. [Rome, Consiglio Nazionale delle Richerche]; London, [etc.], Los Angeles, Symposiums Publ. Div. Pergamon P., 1958. 638pp., illus., plate, tables, diagrs. 100*s*. or $15. *International series of monographs on inorganic chemistry, ed. by H. Taube and A. G. Maddock; vol. 1.*

Most of the papers are in English. *C*

DESTY, D. H., *ed.* 157
Gas chromatography 1958: proceedings of the second symposium organized by the gas chromatography discussion group under the auspices of the Hydrocarbon research group of the Institute of Petroleum and the Koninklijke Nederlandse Chemische Vereniging held at the Royal Tropical Institute, Amsterdam, 19–23 May 1958. London, Butterworths; N.Y., Academic P., 1958. xiii,383pp., tables, diagrs. 70*s*. or $12.

Contains twenty-eight papers on the theory, techniques and apparatus, and applications. *C*

EXTERMANN, R. C., *ed.* 158
Radioisotopes in scientific research: proceedings of the international conference held in Paris in September 1957 under the auspices of Unesco. London, N.Y., [etc.], Pergamon P., 1958. Illus., tables, diagrs., bibliogs. 4 v., 140*s*. or $22.50 each.

Vol. 1, Research with radioisotopes in physics and industry. xxi,761pp. Vol. 2, Research with radioisotopes in chemistry and geology. xxi,741pp. Vol. 3, Research with radioisotopes in human and animal biology and medicine. xxi,763pp. Vol. 4, Research with radioisotopes in plant biology and some general problems. xxi,690pp. Papers are in English, French, and Russian. Summaries in several languages and brief accounts of the discussions are appended to the papers. Vol. 1 covers production of radioisotopes, dosimetry, radioisotope applications to solid state physics, metal physics and metallurgy, and industrial problems. Vol. 2 includes organic chemistry, physical chemistry, analytical chemistry, and geophysics. Vol. 3 illustrates the power and range of radioisotope techniques as research tools in protein, lipid, and carbohydrate metabolism, thyroid and brain physiology and biochemistry, and applications to micro-organisms. Vol. 4 covers mineral metabolism, fission products metabolism, plant biosynthesis, and plant metabolism. *C*

INGRAM, D. J. E. 159
Free radicals: as studied by electron spin resonance. London, Butterworths; N.Y., Academic P., 1958. ix,274pp., tables, diagrs., bibliogs. 50*s*. or $9.50.

An introduction to the methods dealing with the underlying theory, experimental equipment, techniques, and the interpretation of results, with quite a wide range of experimental results obtained in the organic, inorganic, and biological fields. Will be valuable to those considering use of this technique for study of free radicals. *B*

INTERNATIONAL COMMITTEE OF ELECTROCHEMICAL THERMODYNAMICS AND KINETICS 160
Proceedings of the eighth meeting Comptes Rendus de la Huitième Réunion, Madrid 1956. Butterworths, 1958. ix,497pp., plate, tables, diagrs., bibliogs. 95*s*.

Original papers covering a number of important developments in electrochemical research. *C*

JONES, A. G. 161
Analytical chemistry: some new techniques. London, Butterworths; N.Y., Academic P., 1959. viii,268pp., illus., tables, diagrs. 40*s*. or $7.50.

Deals with eight of the newer techniques used in analysis. Though meant primarily for analysts it will be of wider interest. *C*

SEMENOV, N. N. 162
Some problems of chemical kinetics and reactivity; vol. 1; tr. [from the Russian] by J. E. S. Bradley. London, N.Y., [etc.], Pergamon P., 1958. x,306pp., tables, diagrs., bibliog. 50*s*. or $7.50.

An up-to-date, systematic, and authoritative treatment of radical and radical chain reactions is presented by the leading Russian worker in kinetics. *C*

55 GEOLOGY

MASON, B. 163
Principles of geochemistry. 2nd ed. N.Y., Wiley; London, C & H, 1958. ix,310pp., tables, diagrs., bibliog. $8.75 or 68*s*. *B*

RICHTER, C. F. 164
Elementary seismology. San Francisco, Freeman; [London, B & S], 1958. viii,768pp., illus., tables, diagrs., bibliog. $12 or 102*s*.

Written by an international authority on seismology, this excellent work should prove especially useful to those seeking a non-mathematical approach to seismology; geologists in particular will find it invaluable. *B*

SINCLAIR, J. 165
Geological aspects of mining. Pitman, 1958. viii,343pp., illus., tables, diagrs. 50*s*.

Covers elementary aspects of the geology of British coal fields and concludes with accounts of prospecting, boring, and shaft-sinking practice. *B*

551.5 Meteorology

GOLDIE, N. *and others* 166
Upper air temperature over the world, by N. Goldie, J. G. Moore, and E. E. Austin. HMSO, 1958. 228pp., tables, diagrs., bibliog. 30*s*. *Meteorological office, geophysical memoirs no. 101 (first no., vol. XIII).*

A statistical study of air temperatures up to 100 mb. (about ten miles) expressed in map form. *C*

MILLER, A. A. *and* PARRY, M. 167
Everyday meteorology. Hutchinson, 1958. 270pp., illus., plates, diagrs., bibliog. 30*s*.

A detailed guide to weather conditions, for students, farmers, gardeners, and others who have to consider the local elements in relation to their work. *A–B*

6 APPLIED SCIENCES

62 ENGINEERING

623 Military and Naval engineering

ARNOLD, R. 168
Automatic and repeating shotguns. Kaye, 1958. 173pp., illus., plates, tables, diagrs. 16*s*. *A*

BUSSARD, R. W. *and* DE LAUER, R. D. 169
Nuclear rocket propulsion. N.Y., [etc.], London, McG-H, 1958. xiii,370pp., illus., tables, diagrs., bibliog. $10 or 77*s*. 6*d*. *McGraw-Hill series in missile and space technology, ed. by H. G. Stever.*

First text in this field. Covers all unclassified information made available up to 1957. Mainly for rocket engineers. *B*

TELLER, E. *and* LATTER, A. L. 170
Our nuclear future: facts, dangers, and opportunities. Secker and Warburg, 1958. 184pp., plates, diagrs. 21*s*.

Summary of the technical and political aspects of nuclear tests for the general reader. *A*

629 Transport engineering

LAMB, J. 171

The running and maintenance of the marine diesel engine. 6th ed. rewritten. Griffin, 1958. viii,722pp., illus., plates, tables, diagrs. 58*s*.

First ed. 1920. Fundamentally the 6th edition is the same book—a ready help in time of trouble—and as such, much favoured by all engineers in motor ships. It is essentially a practical book, based on the author's long experience at sea. Bound in a special water- and grease-proof cover. *B–C*

SELMAN, G. S. 172

Carefree cruising. Southend-on-Sea, Yachting P., 1958. [6],172pp., illus., plates, tables, diagrs. 12*s*. 6*d*.

The author was for some years naval architect to the British Power Boat Co. His book traces the purchase, refitting, and operation of a 50-ft motor launch, in the course of which much practical information is given, applicable to medium and heavy power yachts up to about 70 ft in length. *A*

63 AGRICULTURE

AUFHAMMER, G. *and others* 173

Barley varieties—EBC. 2nd ed., by G. Aufhammer, P. Bergal, and F. R. Horne, composed under the auspices of the Barley Committee of the European Brewery Convention. Amsterdam, London, [etc.], Elsevier, 1958. xvi,159pp., illus. 30*s*.

Distributed by D. Van Nostrand. An authoritative description of about forty barley varieties, in English, French, and German. Beautifully illustrated. Will be invaluable to those connected with barley growing and the brewing industry. Annual supplements, of new varieties, are to be issued. *C*

GREAT BRITAIN. Ministry of Agriculture, Fisheries, and Food 174

Specifications and methods of analysis for certain pesticides. 3rd ed. HMSO, 1958. x,126pp., tables, diagrs. 7*s*. *Technical bulletin no. 1.*

Authoritative handbook compiled by trade associations and ministry, covering principal pesticides in common use. *C*

HARVEY, N. 175

Farm work study: a basic guide for the farmer, poultry keeper, and market gardener. Farmer & Stock-Breeder Publs., 1958. xii,86pp., illus., plates, tables, diagrs. 8*s*. 6*d*.

A practical work applying work study to several specific farm jobs, their analysis and application of the results, with flow charts. Based on practical experience and a year's study as a Kellog Fellow at Purdue University. *A*

HUGGARD, E. R. 176

Foresters' engineering handbook. Cambridge, Heffer, 1958. viii,150pp., plates, tables, diagrs. 18*s*.

Provides basic data and simple explanations covering the design of pioneer roads and bridges, also planning economics, timber extraction, surveying, quarrying, etc. Written for the forestry officer by an expert who understands his problems. *A–B*

KNIGHT, R. L. *and* KEEP, E. 177

Abstract bibliography of fruit breeding and genetics to 1955: rubus and ribes—a survey. Farnham Royal (Bucks.), Commonwealth Agricultural Bureaux, 1958. iv,254pp., plate. 45*s*. or $6.80. *Technical communication no. 25. Commonwealth Bureau of Horticulture and Plantation Crops, East Malling, Maidstone, Kent.*

Comp. by fruit breeders; includes most berries and currants of commercial value. Covers wide range of literature and antedates existing abstracting services. Author-alphabetical arrangement with cross-references for joint authors: good subject index; 1007 abstracts. *D*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

LONDON UNIVERSITY. University College Communications Research Centre 178
Aspects of translation. Secker & Warburg, 1958. viii,145pp. 25*s*. *Studies in communication, 2.* *A–B*

651 Office management

AMERICAN MANAGEMENT ASSOCIATION 179
Men, machines, and methods in the modern office. N.Y., Office Management Div., American Management Association, 1958. 148pp. $3.75. *A–B*

CEMACH, H. P. 180
Work study in the office. Current Affairs, 1958. viii,166pp., illus., tables, diagrs. 25*s*. *A*

658 Industrial management

MAIER, N. R. F. 181
The appraisal interview: objectives, methods, and skills. N.Y., Wiley; London, C & H, 1958. xiv,246pp., tables, diagrs. $6 or 48*s*.

An instructive psychological analysis, for managerial training, of problems and methods in discussing with subordinates their strong and weak points. *B*

PHILPOTT, W. J. 182
The organization of wholesale textile distribution; with foreword by the Lord Hollenden. Macdonald, 1959. x,11–199pp., illus., tables, diagrs., bibliog. 12*s*. 6*d*. *Commercial textbooks for the distributive trades; gen. ed. R. G. Magnus-Hannaford.*

One of a series of textbooks primarily for students. It deals comprehensively with a subject on which there is little published information. *B*

WOODWARD, J. 183
Management and technology. HMSO, 1958. 40pp., tables, diagrs. 2*s*. 6*d*. *Problems of progress in industry series, no. 3.*

Brief report on a survey of management organization of 100 firms in Essex by a team of research workers from South Essex Technical College. *A*

66 CHEMICAL TECHNOLOGY

BENNETT, H. *and* HAWLEY, W. G. 184
Methods of silicate analysis. Stoke-on-Trent, British Ceramic Research Association, 1958. xii,159pp., tables. 37*s*. 6*d*.

Details are given of the methods of analysing clays and other ceramic materials, including the latest techniques. *C*

HESS, M. 185
Paint film defects: their causes and cure. C & H, 1958. xvi,544pp., illus., plates, bibliog. 75*s*.

First German ed. 1938. First English ed. 1951. An authoritative reference work for paint technologists providing a classified review of paint defects, their identification and causes; intended to provide a lead to methods of overcoming such difficulties. *C*

INSTITUTE OF SILICATE CHEMISTRY, ACADEMY OF SCIENCES OF THE USSR 186
The structure of glass: proceedings of a conference on the structure of glass, Leningrad, November 23–27, 1953; tr. from the Russian by E. B. Uvarov. N.Y., Consultants Bureau; London, C & H, 1958. 296pp., illus., diagrs., bibliogs. $20 or 168*s*.

Russian version published Moscow–Leningrad, Academy of Sciences USSR P., 1953. An extremely important collection of papers adding much to our knowledge of and theories on the nature of the vitreous state. *C*

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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April 1959

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VOLUME 24 . NUMBER 4

001 General knowledge

LAVES, W. H. C. *and* THOMSON, C. A. 187
Unesco: purpose, progress, prospects. Dobson, 1958. xxvi,469pp., tables, bibliog. 63*s*.

A full-scale survey of Unesco, originally published in the U.S.A. in 1957. *B*

02 LIBRARIANSHIP

GREAT BRITAIN. Treasury. Organization and Methods Division 188
A guide to government libraries. 2nd ed. HMSO, 1958. viii,139pp. 7*s*. 6*d*.

First published 1952. This revised edition has been prepared chiefly for the benefit of users outside government departments. *D*

HARROD, L. M. 189
The librarian's glossary: terms used in librarianship and the book crafts. 2nd ed. (rev.). Grafton, 1959. 332pp. 18*s*.

Purpose and coverage of this edition are unchanged but the scope has been slightly widened. There are 1200 more entries than in the first edition of 1938. *D*

KEYS, T. E. 190
Applied medical library practice. Springfield (Ill.), Thomas; Oxford, Blackwell Scientific; Toronto, Ryerson, 1958. xix,495pp., illus., bibliogs. $10.75 or 81*s*.

A comprehensive and authoritative book on modern American practice by a well-known librarian. An excellent work of great value to medical librarians and all who use medical libraries. *C*

RANGANATHAN, S. R. 191
Classified catalogue code, with additional rules for dictionary catalogue code. 4th ed. Madras, Madras Library Association; London, Blunt, 1958. 605,[4]pp. *Rs*. 20 or 42*s*.

This edition implements the layout for a catalogue code arrived at in *Heading and Canons* (1955). The method of arrangement has been changed and the matter thoroughly revised. *B*

SCHWERIN, K. 192
Classification for international law and relations. 2nd ed., rev. and enl. N.Y., Oceana, 1958. xiii,96pp. $3.50.

This scheme was originally developed at the University of Virginia Law Library and is now used in other collections. It seeks a middle ground between the Dewey and Library of Congress schedules. *D*

3 SOCIAL SCIENCES

BOGSCH, A. 193
Universal Copyright Convention: an analysis and commentary. N.Y., Bowker in co-operation with the Copyright Society of the U.S.A., 1958. xxi,279pp. $12.

Each article of the Convention is treated separately in the order in which it stands in the Convention, and there are short chapters on the three protocols also adopted. *B*

33 ECONOMICS

331 Industrial relations

EDWARDS, R. S. *and* TOWNSEND, H. 194
Business enterprise: its growth and organization. London, Macmillan; N.Y., St Martin's P., 1958. xvii,607pp. 60*s*. or $8.40. *B*

HARE, A. E. C. 195
First principles of industrial relations. London, Macmillan; N.Y., St Martin's P., 1958. vii,146pp., bibliog. 12*s*. 6*d*. or $2.

Useful introduction to the study of a subject of importance to all those with supervisory responsibilities. *A*

38 TRADE and COMMUNICATIONS

HAMILTON, D. C. 196
Competition in oil: the Gulf Coast refinery market, 1925–1950. Cambridge (Mass.), Harvard University P.; London, OUP, 1958. xv,233pp., plates, tables, diagrs., bibliog. $7 or 60*s*.

A market analysis with a policy orientation. *C*

PERKINS, W. T. 197
Elementary telecommunications examination guide: covering the City and Guilds of London Institute examination in elementary telecommunication practice and telecommunications (principles), 1. 2nd ed. Newnes, 1958. viii, 320pp., diagrs. 17*s*. 6*d*.

First ed. 1953. A 'cram' book in the form of past examination questions and specimen answers to be used as a supplement to standard textbooks. *B*

SMITH, J. R. G. 198
Elementary telecommunications practice. EUP, 1958. xi,293pp., illus., tables, diagrs., bibliog. 12*s*. 6*d*. *General technical series; gen. ed. C. Lloyd.*

A textbook for the examination of the City and Guilds Institute in elementary telecommunications practice, written by a serving Post Office engineer. *B*

5 NATURAL SCIENCES

53 PHYSICS

AMES, J. S. *and* MURNAGHAN, F. D. 199
Theoretical mechanics: an introduction to mathematical physics. N.Y., Dover; London, Constable, 1958. ix,462,[8]pp., diagrs. $2 or 16*s*.

Reproduction of 1929 edition. Good text for self-study at scholarship or first-year level, and for reference. Full discussion of principles and many worked examples. *B*

BAYLEY, F. J. 200
An introduction to fluid dynamics. A & U, 1958. viii,216pp., plates, diagrs. 28*s*.

An elementary account of the principles of fluid mechanics suitable mainly for mechanical and civil engineering undergraduate students. *B*

BELL, C. G. *and* HAYES, F. N., *eds*. 201
Liquid scintillation counting: proceedings of a conference held at Northwestern University, August 20–22, 1957; sponsored by the National Science Foundation, the Technological Institute of Northwestern University. London, N.Y., [etc.], Pergamon P., 1958. xi,292pp., plates, tables, diagrs., bibliogs. 70*s*.

Original papers on design and applications of liquid scintillation counters. *C*

BOWDEN, F. P. *and* YOFFE A. D. 202
Fast reactions in solids. London, Butterworths; N.Y., Academic P., 1958. ix,164pp., illus., tables, diagrs., bibliog. 40*s*. or $7.

Emphasis is on the experimental approach. Initiation by heat, shock, light, ionizing radiations, and spontaneous reactions are discussed and there is a chapter on the fast growth of explosions. Of special interest to those concerned with explosives and rocket fuels. *B*

EVERETT, D. H. *and* STONE, F. S., *eds.* 203
The structure and properties of porous materials: proceedings of the tenth symposium of the Colston Research Society held in the University of Bristol March 24th–March 27th, 1958. London, Butterworths; N.Y., Academic P., 1958. xiv,389pp., illus., tables, diagrs. 60*s*. or $12. *Colston papers, vol. X.* *C*

GALBRAITH, W. 204
Extensive air showers. N.Y., Academic P.; London, Butterworths, 1958. xvi, 211pp., plates, tables, diagrs., bibliog. $7.50 or 40*s*.

The experimental evidence concerning showers of ions in the atmosphere and the theoretical treatment and conclusions regarding them are described for non-specialist scientists. Should also form a useful, brief summary for the specialist. Well documented. *B*

KELLAWAY, F. W. 205
Examples in applied mathematics. 2nd ed. Blackie, 1959. vi,128pp., diagrs. 7*s*. 6*d*.

A good collection of about 500 examples, with answers, on statics, dynamics, and hydrostatics, of advanced level, General Certificate of Education or National Certificate standard. *B*

MACMILLAN, W. D. 206
Statics and the dynamics of a particle. N.Y., Dover; London, Constable, 1958. xviii,430,[16] pp., diagrs. $2 or 16*s*.

Starts with elementary concepts and leads to an intermediate level exposition of particle dynamics. Intended for students interested mainly in astronomy, physics, or mathematics and not in the technical aspect of engineering. *B*

MILES, J. W. 207
The potential theory of unsteady supersonic flow. Cambridge, CUP, 1959. xii,220pp., diagrs., bibliog. 45*s*. *Cambridge monographs on mechanics and applied mathematics; gen. eds. G. K. Batchelor and H. Bondi.*

A mathematical treatise on the theory of unstable supersonic flow over an aircraft wing. The author may be regarded as an authority on aerodynamics. *C*

SEELY, S. 208
Introduction to electromagnetic fields. N.Y., [etc.], London, McG-H, 1958. xi,308pp., illus., diagrs., bibliog. $8.50 or 66*s*. *Electrical and electronic engineering series, ed. by F. E. Terman.*

Deals with current flow fields, static electric fields, static magnetic fields, dynamic fields. Maxwell's equations, and electromagnetic phenomena and shows their interrelations. Largely mathematical, with examples and problems. *B*

VAN DER ZIEL, A. 209
Solid state physical electronics. Macmillan, 1958. xii,604pp., diagrs. 37*s*. 6*d*.

Mainly for advanced students of electrical engineering and intended to provide an understanding of the operation of solid-state electronic devices. *B*

54 CHEMISTRY

HÜCKEL, W. 210
Theoretical principles of organic chemistry; vol. 2; tr. from the corrected 7th German ed. by F. H. Rathmann. Amsterdam, Elsevier, 1958. xi,1046pp., tables, diagrs. 95*s*. or $19.

Distributed in British Commonwealth and U.S.A. by Van Nostrand. Translation of a well-known German work dealing with the physico-organic aspects of the subject. Suitable for advanced first-degree students. *B*

548 Mineralogical sciences

ANDERSON, B. W. 211
Gem testing. 6th ed. Heywood, 1958. 334pp., illus., tables, bibliog. 42*s*.

First ed. 1942. Retains the general arrangement of the 5th ed. of 1951 but has been thoroughly revised. Includes much new material and many additional illustrations. *B*

212
SOVIET research in crystallography: chemistry collection no. 5; vols. 1 and 2; tr. from the Russian. N.Y., Consultants Bureau, 1958. 630pp., tables, diagrs., bibliog. Vol. 1, $100; vol. 2, $30; complete set $115.

Volume 1 contains sixty-one papers representing investigations of many systems, mainly inorganic, usually with phase diagrams. Volume 2 contains thirty-three papers describing mainly crystal structures, methods and problems of x-ray analysis, crystal growth, and the nature of atomic bonds. *C*

6 APPLIED SCIENCES

BROOKES, V. J. *and* JACOBS, M. B. 213
Poisons: properties, chemical identification, symptoms and emergency treatment. 2nd ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. xvi,272pp., illus., plates, tables, diagrs., bibliog. $6.50 or 49*s*.

A simple American reference book on toxicology primarily intended for police officers, the medical profession, and industrial workers, giving guidance on diagnosing cases of poisoning and indication of treatment. *B*

MONTAGNA, W. *and* ELLIS, R. A. 214
Biology of hair growth. N.Y., Academic P., 1958. 520pp., illus. $15.

Proceedings of the International Conference on the biology of the hair follicle and the growth of hair, held under the auspices of the British Society for Research on Ageing. *C*

62 ENGINEERING

OLSON, H. F. 215
Dynamical analogies. 2nd ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. xi,278pp., illus., tables, diagrs. $6.75 or 51*s*.

First ed. 1943. Deals with analogies between electrical, mechanical rectilineal, mechanical rotational, and acoustical systems. Assumes a knowledge of the elements of alternating circuit theory and physics. *B*

WIENER, N. 216
Nonlinear problems in random theory. N.Y., Technology P. of Mass. Institute of Technology and Wiley; London, C & H, 1958. x,131pp., diagrs. $4.50 or 36*s*. *Technology press research monographs.*

Using the concept of random processes, a study is presented of non-linear problems in physics, mathematics, electrical engineering, physiology, and communication theory. Intended for research workers. *C*

620.1 Strength of materials

BRITISH INTERNAL COMBUSTION ENGINE RESEARCH ASSOCIATION 217
A handbook of torsional vibration; comp. by E. J. Nestorides. Cambridge, CUP, 1958. xxii,664pp., plates, diagrs., bibliog. 110*s*.

Primarily for the engine designer. *C*

STANFORD, E. G. *and* FEARON, J. H., *eds.* 218
Progress in non-destructive testing; vol. 1. Heywood, 1958. vii,267pp., plates, tables, diagrs., bibliogs. 60*s*.

The papers are of a high standard yet easy to read, and although the book may not provide any immediate answers to readers' problems it is the first of a series which promises to be a most useful and interesting reference work. *C*

621 Mechanical engineering

621.039 Nuclear engineering

BOWEN, J. H. *and* MASTERS, E. F. O. 219
Nuclear reactor control and instrumentation. Temple P., 1959. x,78pp., tables, diagrs., bibliog. 12*s*. 6*d*. *Nuclear engineering monographs, V; gen. ed. W. K. Mansfield.*

Brief account for the non-specialist student of the control characteristics and pertinent design features of the gas-cooled graphite-moderated nuclear reactor, with special reference to control rods and instrumentation. A great deal of information is concentrated into a small space. Useful worked examples. *B*

HARRISON, J. R. 220
Nuclear reactor shielding. Temple P., 1958 [i.e. Jan. 1959]. viii,68pp., tables, diagrs., bibliog. 10*s*. 6*d*. *Nuclear engineering monographs, IV; gen. ed. W. K. Mansfield.*

Short account of the principles underlying the design of shielding for neutron and γ-sources especially for large and small nuclear reactors and neutron sources. Aimed at the non-specialist. *B*

MARTIN, F. S. *and* MILES, G. L. 221
Chemical processing of nuclear fuels. London, Butterworths; N.Y., Academic P., 1958. x,242pp., tables, diagrs., bibliog. 40*s*. or $7.50.

First British textbook on this subject for science and engineering graduates. *B*

WOOTTON, W. R. 222
Steam cycles for nuclear power plant. Temple P., 1958 [i.e. Jan. 1959]. viii, 66pp., tables, diagrs. 10*s*. 6*d*. *Nuclear engineering monographs, VI; gen. ed. W. K. Mansfield.*

Analysis and design of high-efficiency steam-raising plant for nuclear power stations. *B*

621.3 Electrical engineering

CLARKE, A. C. 223
Voice across the sea. Muller, 1958. x,220pp., plates. 18*s*.

An excellent book for the scientifically minded layman interested in communications. Goes well beyond the limits of the title, and suggests great future prospects well within the bounds of reason. *A*

CONTI, T. 224
Metallic rectifiers and crystal diodes. N.Y., Rider, 1958. [155]pp., various pagination, illus., tables, diagrs. $2.95.

Non-mathematical publication in paper-back form covering construction, characteristics, and applications of all types of metallic and crystal rectifiers; refers to American types and uses American terminology. *A–B*

DONALDSON, P. E. K. *and others* 225
Electronic apparatus for biological research, with contributions by J. W. L. Beament, F. W. Campbell, D. W. Kennard, R. D. Keynes, K. E. Machin, I. A. Silver. London, Butterworths; N.Y., Academic P., 1958. xii,718pp., plates, tables, diagrs. 120*s*. or $20.

Principles, design, and construction of electronic apparatus for the experimental biologist with little or no training in electrical theory. *B*

FEINSTEIN, A. 226
Foundations of information theory. N.Y., [etc.], London, McG-H, 1958. x,137pp., bibliog. $6.50 or 50*s*. 6*d*. *Electrical and electronic engineering series, ed. by F. E. Terman, and others.* *C*

FROST-SMITH, E. H. 227
Theory and design of magnetic amplifiers. C & H, 1958. xix,487pp., plates, illus., bibliog. 75*s*. *Automation and control engineering series, ed. by J. F. Coales.*

Clear exposition of the rather difficult theory of magnetic amplifiers and of its application to practical design problems. Should be of value to the professional engineer, as well as to the university student. *B*

GOTTLIEB, I. 228
Basic pulses. N.Y., Rider, 1958. iv,176pp., illus., diagrs. $3.50.

Non-mathematical introduction to pulse techniques and pulse circuits, for servicing engineers and students of electronics. *B*

KRUGMAN, L. 229
Fundamentals of transistors; 2nd ed., rev. N.Y., Rider, 1958; London, C & H, 1959. iv,168pp., diagrs., bibliog. $3.50 or 25*s*.

1st ed. 1954. A practical introductory text on semiconductors for students and circuit-design engineers. Physical and mathematical concepts are avoided but all necessary fundamentals on transistor operation, performance, and characteristics are included. *B*

MARTIN, T. L. 230
Physical basis for electrical engineering. Macmillan, 1958. xii,410pp., tables, diagrs. 30*s*.

Written primarily for engineers who would like to familiarize themselves with the momentous progress in physics during the last ten years or so. *B*

SCHURE, A., *ed.* 231
Gas tubes. N.Y., Rider, 1958. viii,72pp., illus., diagrs. $1.50. *Electronic technology series, no. 166–24.*

An elementary exposition of the basic principles underlying the operation of gas-filled tubes used for rectification, voltage regulation, etc. *B*

622 Mining

SELL, G. *and* DOSSETT, H. A., *eds.* 232
Handbook of the petroleum industry. Newnes, 1958. vii,213pp., illus., tables. 25*s*.

A readable informative little book intended as an introduction to petroleum. Covers both technical and economic aspects of the industry. *A*

STEINERT, H. 233
The atom rush: man's quest for radio-active materials; tr. and adapted from the German by N. Wharton. Thames & Hudson, 1958. vi,183pp. 18*s*.

The search for deposits of radioactive and other rare metals and the struggle for control of these deposits. German ed. 1957. *A*

STOČES, B. 234
Introduction to mining. 1st rev. ed. London, [etc.], Los Angeles, Pergamon P., 1958. Illus., diagrs., bibliogs. 2v. 70*s*. or $12.

1st English ed. 1954. Vol. 1, text, with foreword by E. Wisser: 710pp. Vol. 2, illustrations, by L. Kosslerova-Novakova: 368pp. A comprehensive textbook for mining students, most useful for beginners. Various methods of working both ore and coal deposits are well described and illustrated. *B*

624 Civil engineering

MORGAN, W. *and* WILLIAMS, D. T. 235
Structural mechanics. Pitman, 1958. vii,427pp., tables, diagrs. 30*s*.

A textbook on structures, designed to test student's knowledge and give him the necessary practice in graphical and mathematical solutions of structures. *B*

PETER, J., *ed.* 236
An international review of aluminium in modern architecture, 1958 ed.: companion to *Aluminium in modern architecture*, vols. 1 and 2. Louisville (Kentucky), Reynolds Metals Co.; London, C & H, 1958. 118pp., illus., tables, diagrs., bibliog. $5 or 40*s*.

This is a supplement to a most elaborately produced two-volume work published in 1957. It consists principally of a further selection of buildings, in many countries, in which aluminium has been extensively used. *C*

67/68 MANUFACTURES

BLACHFORD, G. 237
Metalwork in theory and practice. Toronto, Clarke Irwin; London, Christophers, 1958 [i.e. Jan. 1959]. [6],188pp., illus., tables, diagrs. 15*s*.

A good account of metal-working tools with a brief outline of their correct uses and of the basic metal-working and jointing processes. It is of handicraft rather than full-scale workshop standard. *B*

238
RECORD of the 1958 annual convention of the British Wood Preserving Association, Cambridge, July 8th–11th, 1958. The Association, [1958]. x,190pp., illus., tables, diagrs. 12*s*. 6*d*.

Seven papers together with the discussions on them: well printed, illustrated, covering aspects of timber preservation. *C*

SKEIST, I. *and* SOMERVILLE, G. R. 239
Epoxy resins. N.Y., Reinhold; London, C & H, 1958. xiii,293pp., illus., tables, diagrs., bibliog. $5.50 or 44*s*. *Reinhold plastics applications series.*

Semi-technical American review of the application of epoxy resins, for non-specialist readers. Frequent reference to American trade names and companies. Excellent bibliography. *B*

THOMPSON, M. S. 240
Gum plastics. N.Y., Reinhold; London, C & H, 1958. xi,193pp., illus., tables, diagrs. $4.50 or 36*s*. *Reinhold plastics applications series.*

Deals with the high-impact rubber modified styrene and vinyl chloride polymers. Their processing, fabrication, and applications occupy most of the book. *B*

681 Precision mechanisms

ALT, F. L. 241
Electronic digital computers: their use in science and industry. Academic Books, 1958. x,536pp., diagrs. 80*s*. *Applied mathematics and mechanics series.*

B–C

CASEY, R. S. *and others, eds.* 242
Punched cards: their applications to science and industry, ed. by R. S. Casey, J. W. Perry, M. M. Berry, and A. Kent. 2nd ed. N.Y., Reinhold; London, C & H, 1958. x,697pp., illus., bibliog. $15 or 120*s*.

Previous ed. 1950 by R. S. Casey and J. W. Perry. *C*

COXON, W. F. 243
Flow measurement and control. Heywood, 1959. x,312pp., illus., plates, tables, diagrs. 55*s*. *Physical processes in the chemical industry, vol. 3, ed. by J. C. Robb and W. F. Coxon.*

An easy-to-read description of fluid flowmeters, recorders, and control mechanisms suitable for hydraulic and chemical engineers and instrument physicists. Theory has been kept down to the minimum. *B*

HUMPHREY, W. S. 244
Switching circuits with computer applications. N.Y., [etc.], London, McG-H, 1958. viii,264pp., tables, diagrs., bibliog. $8.50 or 66*s*.

Deals with the design and behaviour of circuits consisting of numerous relays or relay-like elements used in calculating devices. *B*

7 FINE ARTS

72 ARCHITECTURE

ASSOCIATION FOR APPLIED SOLAR ENERGY 245
Living with the sun: vol. 1, sixty plans selected from the entries in the 1957 international architectural competition to design a solar heated residence. Phoenix (Ariz.), the Association, 1958. [60]pp., illus., diagrs. $6.

Attractively produced, conveniently arranged book for architects and others interested in this new technique. *C*

CONKLIN, G. 246
The weather conditioned house. N.Y., Reinhold; London, C & H, 1958. xiv,238pp., illus., plates, tables, diagrs., bibliog. $14.75 or 118*s*. *B–C*

77 PHOTOGRAPHY

BAINES, H. 247
The science of photography. Fountain P., 1958. 319pp., illus., diagrs. 38*s*. 6*d*.

Well-written lucid book for the general reader. Elementary science is marked so that it can be skipped by the scientific reader. *B*

LARMORE, L. 248
Introduction to photographic principles. Englewood Cliffs (N.J.), Prentice-Hall; [London, B & S], 1958. ix,229pp., illus. $8 or 54*s*. *B*

VERRY, H. R. 249
Document copying and reproduction processes. Fountain P., 1958. 328pp., illus., tables, diagrs., bibliog. 52*s*. 6*d*.

An excellent, authoritative book, of immense value to anyone even remotely concerned with the subject, with useful information about the preparation of originals and all aspects of reproduction. *B*

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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Tools for machine literature searching: semantic code dictionary, equipment, procedures, with the semantic code dictionary under the gen. editorship of J. L. Melton. N.Y., London, Interscience, 1958. xviii,972pp. $27.50 or 10 *gns. Library science and documentation series, ed. by J. H. Shera; vol. 1.* *C*

01 BIBLIOGRAPHY

RILEY, V. *and* GASS, S. I. 251
Linear programming and associated techniques: a comprehensive bibliography on linear, non-linear, and dynamic programming. [Rev. ed.]. Baltimore (Md), Johns Hopkins University P.; [London, OUP], 1958. x,613pp. $6 or 48*s*. *Johns Hopkins University. Operations research office. Bibliographic reference series, no. 5.*

First published 1954. Entries are annotated and the number of references has been doubled since the original listing. *D*

TAUBER, M. F. *and others* 252
The Columbia University libraries: a report on present and future needs, prep. for the president's committee on the educational future of the university, by the subcommittee on the university libraries, M. F. Tauber, C. D. Cook, and R. H. Logsdon. N.Y., Columbia University P., 1958. xi,320pp. $5 or 40*s*. *Columbia University studies in library service, no. 9.*

A very thorough survey of all aspects of the university libraries' work. *B*

1 PHILOSOPHY

RANDALL, J. H. 253
Nature and historical experience: essays in naturalism and in the theory of history. N.Y., Columbia University P.; London, OUP, 1958. ix,326pp. $5.50 or 45*s*. *C*

THORNDIKE, L. 254
A history of magic and experimental science; vols. 7 and 8, the seventeenth century. N.Y., Columbia University P.; London, OUP, 1958. 2 v. $10 or 80*s*. each.

Vol. 7, x,695pp.; vol. 8, viii,808pp. Continuing a famous work of the highest importance in its field. *B–C*

3 SOCIAL SCIENCES

37 EDUCATION

BLACKWELL, A. M. 255
Lists of researches in education and educational psychology, supplement 3: presented for higher degrees in the universities of the United Kingdom and the Irish Republic in the years 1956 and 1957; classified according to the Dewey decimal system. Newnes, 1958. 64pp. 15*s*. *National Foundation for Educational Research in England and Wales, publications no. 11.* *D*

STREVENS, P. 256
Aural aids in language teaching; with a catalogue of gramophone records for use in teaching English. Longmans Green for the British Council, 1958. 44pp., plates, bibliog. 3*s*. *B*

5 NATURAL SCIENCES

CHAMBERS'S technical dictionary, ed. by C. F. Tweney and L. E. C. Hughes. [3rd] rev. ed. with supplement. London, Edinburgh, Chambers, 1958. viii, 1028pp. 35*s*. 257

Includes an enlarged supplement containing new terms relating to the latest advances in science and technology. Original text has also been extensively revised. *D*

COX, D. R. 258
Planning of experiments. N.Y., Wiley; London, C & H, 1958. vii,308pp., tables, diagrs., bibliog. $7.50 or 60*s*. *Wiley publications in applied statistics.*

Many problems and ideas of experimental design presented in a lucid, thorough, and authoritative manner with use of a minimum of mathematics and statistics. For the experimentalist and user of experimental design. Numerous well-chosen examples add to the value. *B*

NEWTON, *Sir* I. 259
Papers and letters on natural philosophy and related documents, ed. with a general introduction by I. B. Cohen assisted by R. E. Schofield, with explanatory prefaces by M. Boas, C. C. Gillispie, T. S. Kohn, and P. Miller. Cambridge, CUP, 1958. xiii,501pp. 70*s*. *A*

51 MATHEMATICS

GASS, S. I. 260
Linear programming: methods and applications. N.Y., [etc.], London, McG-H, 1958. xii,223pp., tables, diagrs., bibliog. $6.50 or 50*s*. 6*d*. *C*

HOHN, F. E. 261
Elementary matrix algebra. N.Y., [London], Macmillan (N.Y.), 1958. xiii, 305pp., diagrs., bibliog. $7.50 or 52*s*. 6*d*.

An easy-paced introduction to matrices up to the Cayley–Hamilton theorem and Hermitian forms for the novice needing matrix theory mainly for applications. Results are introduced through simple examples, with plenty of good exercises. *B*

LEVY, H. *and* LESSMAN, F. 262
Finite difference equations. Pitman, 1959. viii,278pp., diagrs. 37*s*. 6*d*.

This useful account of methods of solution of difference equations, including non-linear equations and equations with variable coefficients, is based on M.SC. lectures given at Imperial College. *B*

52 ASTRONOMY

LEHNERT, B., *ed.* 263
Electromagnetic phenomena in cosmical physics: International Astronomical Union symposium no. 6, held in Stockholm, August 1956. Printed with financial assistance from Unesco, Cambridge, CUP, 1958. xiii,545pp., plates, tables, diagrs. 50*s*.

Fifty-six advanced research papers dealing with the magnetic fields in the sun and stars and in interplanetary space. *C*

WHITROW, G. J. 264
The structure and evolution of the universe: an introduction to cosmology. Rev. ed. Hutchinson, 1959. 212pp., plates, diagrs., bibliog. 21*s*.

Previous ed. 'The structure of the universe', 1949. Largely rewritten and enlarged to include recent results of astronomical research. *A*

53 PHYSICS

ATKINS, K. R. 265
Liquid helium. Cambridge, CUP, 1959. x,312pp., tables, diagrs., bibliog. 60*s*. *Cambridge monographs on physics, ed. by N. Feather and D. Shoenberg.*

This well-written monograph by a recognized authority thoroughly reviews experimental and theoretical progress made in the study of liquid helium. *C*

GRIFFIN, D. R. 266
Listening in the dark: the acoustic orientation of bats and men. New Haven (Conn.), Yale University P., 1958. xviii,414pp., plates, tables, diagrs., bibliog. $7.50.

Well-written and comprehensive account of all the research carried out during the last twenty years on echolocation. An outstanding account of exciting adventures in pursuit of science. *A–B*

LEFSCHETZ, S., *ed.* 267
Contributions to the theory of nonlinear oscillations; vol. 4. Princeton (N.J.), Princeton University P.; London, OUP, 1958. 211pp., diagrs. 30*s*. *Annals of mathematics studies, no. 41.*

Maintains the high level of the series. Contains ten papers, including a noteworthy contribution to the theory of discontinuous forcing terms, and a survey of Lyapunov's second method. *C*

MORTON, H. *and* MORTON, D. S. 268
Science for coalmining students; with a foreword by C. McLuckie. 2nd ed. Technical P., 1959. x,251pp., illus., tables, diagrs. 15*s*.

Previous ed. 1952. Intended for students in the preliminary grades of coal-mining courses. *B*

54 CHEMISTRY

CHALLENGER, F. 269
Aspects of the organic chemistry of sulphur. London, Butterworths; N.Y., Academic P., 1959. vii,253pp., diagrs., bibliog. 40*s*. or $7.50. *Organic chemistry monographs, ed. by J. W. Cook and M. Stacey.*

Deals with six selected topics, relating to sulphur compounds of biological interest, and to those found in petroleum oils and coal tar. Extensive bibliography. *C*

FLASCHKA, H. A. 270
Edta titrations: an introduction to theory and practice. London, N.Y., [etc.], Pergamon P., [1959]. 138pp., diagrs. 42*s*. or $6.50.

A monograph for students dealing predominantly with the practical aspects of Edta in qualitative analysis. Experimental details are given. *B*

LANGFORD, K. E. 271
Analysis of electroplating and related solutions. 2nd ed. Teddington, Draper, 1958. xvi,424pp., tables, diagrs. 60*s*. or $9.

Previous ed. 1951. Describes analytical methods for plating and allied solutions. Recommended to the practical plater and control analyst. *C*

57 BIOLOGY

BODENHEIMER, F. S. 272
The history of biology: an introduction. Dawson, 1958. 465pp., illus., plates, diagrs. 42*s*.

An unusual history. Divided into three parts: philosophical and methodological aspects, an outline history, a collection of extracts from original sources. *B*

STODOLA, F. H. 273
Chemical transformations by microorganisms. N.Y., Wiley; London, C & H, 1958. x,134pp., plate, tables, diagrs. $4.50 or 34*s*. *E. R. Squibb lectures on chemistry of microbial products.*

Presented at the Institute of Microbiology, Rutgers, the State University of New Jersey. Deals, in three chapters, with the chemical composition of micro-organisms, the organic type reactions which they can effect, and their synthetic powers. Extensive bibliography. *B*

577.1 Biochemistry

274
BIOLOGICAL preparations; vol. 6; ed. in chief, C. S. Vestling. N.Y., Wiley; London, C & H, 1958. ix,105pp., tables, diagrs. $8.25 or 42*s*.

Contains nineteen selected and tested biochemical preparations ranging from enzymes through metabolic intermediates to metabolic products and to compounds of general biochemical interest. Valuable to the student and research worker. *B*

CIBA FOUNDATION 275
Symposium on the biosynthesis of terpenes and sterols; eds for the Foundation, G. E. W. Wolstenholme and M. O'Connor. Churchill, 1959. xii,311pp., tables, diagrs., bibliog. 45*s*. *Symposia, general series.*

Seventeen papers and discussion by outstanding workers from a wide range of countries make this one of the most valuable books available on chemical and biochemical aspects of biosynthesis. Editing and presentation are of a high standard, and documentation is full. *B*

58 BOTANY

HALLSWORTH, E. G., *ed.* 276
Nutrition of the legumes: proceedings of the University of Nottingham fifth Easter school in agricultural science, 1958. London, Butterworths; N.Y., Academic P., 1958. x,360pp., illus., tables, diagrs. 55*s*. or $3.50.

A symposium by some twenty-five authors with experience of both temperate and tropical conditions. Deals chiefly with root-nodules and nitrogen-fixation but also contains information on mineral requirements of the Leguminosae. *C*

59 ZOOLOGY

CARTHY, J. D. 277
An introduction to the behaviour of invertebrates. A & U, 1958. xiii,381pp., illus., plates, tables, diagrs., bibliog. 45*s*. *B–C*

CLARKE, J. F. G. 278
Catalogue of the type specimens of microlepidoptera in the British Museum (Natural History) described by E. Meyrick; vol. 3. British Museum (Natural History), 1958. [4],600pp. 120*s*.

Object is to select and designate lectotypes of species of microlepidoptera, to stabilize the nomenclature of the species examined at the British Museum. Secondary object is a complete alphabetical list of the species, with a citation to the original description of each. *D*

NALBANDOV, A. V. 279
Reproductive physiology: comparative reproductive physiology of domestic animals, laboratory animals and man; drawings by E. Gillespie. San Francisco, Freeman; [London, B & S], 1958. xi,271pp., illus., tables, diagrs., bibliog. $6.50 or 58*s*. *College texts in agricultural science, animal science series, ed. by G. W. Salisbury and E. W. Crampton.*

A clearly-written, well-presented, and commendably complete account of the complex relationships revealed by modern research on the process of reproduction in man, his domestic mammals, and birds. *B–C*

6 APPLIED SCIENCES

62 ENGINEERING

621 Mechanical engineering

ADDISON, H., *comp.* 280
The pump users' handbook; comp. on behalf of the British Pump Manufacturers' Association. Pitman, 1958. vi,122pp., tables, diagrs. 30*s*. *B*

BARTLETT, R. L. 281
Steam turbine performance and economics, with contributions by J. E. Mulder and R. C. Sheldon. N.Y., [etc.], London, McG-H, 1958. xvi,317pp., illus., tables, diagrs., bibliog. $12.50 or 97*s*.

Deals with the detailed calculation of steam power plant performance, and its application in preparing economic studies. Written principally for those in the power supply industry and based on U.S. practice. *C*

CORMACK, J. A. 282
Applied mechanics. Chatto & Windus, 1958 [i.e. Jan. 1959]. x,342pp., tables, diagrs. 30*s*.

Suitable for elementary engineering students. The text and illustration by worked examples are very clear. *B*

GATES, P. 283
Jigs, tools and fixtures: their drawing and design. 5th ed. rev. Technical P., 1959. vi,215pp., plates, tables, diagrs. 30*s*.

New edition of a well-known textbook brought up to date to include modern production techniques. *B*

HARDY, H. W. 284
Jig and fixture details and units: selected for the guidance of jig and fixture designers, and production engineering students. Brighton, Machinery Publishing Co., 1958. 172pp., tables, diagrs. 18*s*. 6*d*. *Machinery's standard reference series.*

The tables in this volume will prove most useful to those starting in jig and fixture design. *B*

RAGAZZINI, J. R. *and* FRANKLIN, G. F. 285
Sampled-data control systems. N.Y., [etc.], London, McG-H, 1958. ix,331pp., tables, diagrs., bibliog. $9.50 or 74*s*. *McGraw-Hill series in control systems engineering, ed. by J. R. Ragazzini and W. E. Vannah.* *C*

621.7 Workshop practice

BLACKBURN, R. G. *and* CASSIDY, J. 286
Sheet metal work; part 2, calculations and science for the intermediate examination of the City and Guilds of London Institute. Edward Arnold, 1958. iv, 219pp., illus., tables. 10*s*. 6*d*.

A clear textbook for the use of apprentices. *B*

HERZKA, A. *and* PICKTHALL, J. 287
Pressurised packaging (aerosols). London, Butterworths; N.Y., Academic P., 1958. xi,411pp., illus., tables, diagrs., bibliogs. 63*s*. or $12.

An authoritative review of pressurized packaging by two eminent British workers in this field. Covers details of formulation, types of container, and packing methods and equipment, with a full bibliography. *C*

623 Military and Naval engineering

U.S. LIBRARY OF CONGRESS 288
Russian–English glossary of guided missile, rocket and satellite terms; comp. by A. Rosenberg. Washington, Reference Department Library of Congress, 1958. vi,351pp. $2.50.

Over 4000 terms taken from monographs and periodicals published in the U.S.S.R. from 1955–8. The work will be valuable for translators, abstractors, and research workers. *B*

627 Natural waters and channels

COOPER, H. R. 289
Practical dredging. Glasgow, Brown, Son & Ferguson, 1958. xvi,270,[24]pp., illus., plates, tables, diagrs. 65*s*.

A comprehensive and authoritative book on all aspects of dredging; the selection of the most suitable type, its staffing, use, and maintenance. *A*

HAMMOND, R. 290
Introduction to dock and harbour engineering. Nelson, 1958. xii,160pp., plates, diagrs. 25*s*. *Nelson's nautical series, ed. by A. C. Hardy.*

A survey of recent work suitable for the general reader and those interested mainly in port operation. *A*

THORN, R. B., *ed.* 291
The design of land drainage works: a collection of papers selected, annotated and arranged in the form of a design handbook. Butterworths, 1959. [16], viii,236pp., illus., tables, diagrs., bibliog. 35*s*.

A selection of technical papers relating to the design of land-drainage works, selected by a river-board engineer, and supplemented by explanatory notes. *B*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

655 Printing, publishing, book trade

MCLEAN, R. 292
Modern book design: from William Morris to the present day. Faber, 1958. xii,116pp., illus. 15*s*. *A*

MOXON, J. 293
Mechanick exercises on the whole art of printing (1683–4), ed. by H. Davis and H. Carter. OUP, 1958. xiii,480pp., illus., plates. 105*s*. *C–D*

ARROW, K. J. *and others* 294
Studies in the mathematical theory of inventory and production, by K. J. Arrow, S. Karlin, H. Scarf, with contributions by M. J. Beckmann, J. Gessford, R. F. Muth. Stanford (Calif.), Stanford University P.; London, OUP, 1958. x,340pp., tables, diagrs., bibliog. $8.75 or 70*s*. *Stanford mathematical studies in the social sciences, vol. 1.* *C*

658 Industrial management

CARTER, C. F. *and* WILLIAMS, B. R. 295
Investment in innovation, [by] C. F. Carter and B. R. Williams on behalf of the Science and Industry Committee. OUP, 1958. ix,167pp., tables. 15*s*. *B*

WRIGHT, F. J. 296
The elements of modern industrial organization. Macdonald & Evans, 1958 [i.e. Jan. 1959]. xii,210pp., illus., tables, diagrs., bibliog. 18*s*.

An elementary account of the principles of industrial management, covering the beginnings of management thought in this country, structure of industry, and need for management. Stress is laid on human relations, and planning and research in workshop practice. *A*

66 CHEMICAL TECHNOLOGY

297
ADVANCES in petroleum chemistry and refining; vol. 1, ed. by K. A. Kobe and J. J. McKetta. N.Y., London, Interscience, 1958. xv,641pp., illus., tables, diagrs., bibliog. $13.50 or 103*s*. *A–B*

APPS, E. A. 298
Printing ink technology. Leonard Hill, 1958. xxii,552pp., plates, tables, diagrs. 70*s*. *A*

CRUESS, W. V. 299
Commercial fruit and vegetable products. 4th ed. N.Y., London, [etc.], McG-H, 1958. vii,884pp., illus., tables, diagrs., bibliog. $15 or 116*s*. 6*d*. *McGraw-Hill publications in the agricultural sciences, ed. by R. A. Brink.*

Previous ed. 1948. *B*

MELVILLE, *Sir* H. 300
Big molecules; based on the Royal Institution Christmas lectures. Bell, 1958. 180pp., illus., plates, diagrs. 15*s*. *A*

SHAND, E. B. 301
Glass engineering handbook, with special sections by C. H. Greene and J. A. Grant, and foreword by W. H. Armistead. 2nd ed. N.Y., [etc.], London, McG-H, 1958. xi,484pp., illus., tables, diagrs., bibliog. $10 or 77*s*. 6*d*.

An extremely useful compilation intended especially for users, as distinct from producers, of glass, though the latter will find it valuable. *B*

SOCIETY OF CHEMICAL INDUSTRY 302
Fundamental aspects of the dehydration of foodstuffs: papers read at the conference held in Aberdeen, 25th–27th March, 1958, with the discussions that followed. The Society, 1958 [i.e. Jan. 1959]. [4],238pp., illus., tables, diagrs. 48*s*.

Nineteen papers covering the structure of plant and animal tissues in relation to dehydration, studies of the diffusion of water through tissues, and the effects of dehydration on proteins and other components of foods. *C*

67/68 MANUFACTURES

BARNARD, A. 303
The Australian wool market, 1840–1900. Melbourne, Melbourne University P. on behalf of the Australian National University; London, CUP, 1958. xvii, 238pp., plates, tables, diagrs., bibliog. 35*s*.

Mainly compiled from unpublished records. *A–B*

BRITISH STEEL CASTINGS RESEARCH ASSOCIATION 304
A practical guide to the design of steel castings. Sheffield, the Association, 1958. [4],52pp., tables, diagrs. 12*s*. 6*d*.

Originally prepared by the Commission technique de la metallurgie des aciers of the Centre technique des industries de la fonderie, Paris. Deals adequately with the principles of casting and shows an appreciable amount of good foundry knowledge. *B*

CROSSLAND, A. 305
Modern carpet manufacture. Manchester, Columbine P., 1958. vii,176pp., illus., plates, diagrs. 21*s*.

Monograph. Up to date and includes tufted carpets. *B*

HORDERN, R. H., *ed.* 306
The woodworking machinist, ed. by R. H. Hordern, with contributions by other experts; vols 1 and 2. Caxton, 1958. 2v., illus., plates, diagrs. 90*s*.

Vol. 1, xv,327pp.; vol. 2, x,329pp. Principles required are fully explained. *C*

O'FLAHERTY, F. *and others* 307
The chemistry and technology of leather; vol. 2, types of tannages, ed. by F. O'Flaherty, W. T. Roddy and R. M. Lollar. N.Y., Reinhold; London, C & H, 1958. xiv,554pp., tables, diagrs., bibliog. $16.25 or 132*s*. *American Chemical Society monographs, no. 134.* *B*

69 BUILDING

308
MANUAL of civil engineering plant and equipment: comprising full details and specifications of mechanical plant and equipment which is manufactured or supplied by firms in the United Kingdom and used in connection with all civil engineering, building, quarrying, and general construction; comp. by J. M. Paxton. Contractors Record, 1958. [12],932pp., tables, diagrs. 130*s*. *D*

WARLAND, D. E. 309
The fundamentals of estimating for builders' work. ULP, [1958]. [7],200pp., tables, diagrs. 12*s*. 6*d*.

Elementary estimating for students. *B*

WEBSTER, S. 310
Plumbing materials and techniques. Batsford, 1959. vi,218pp., tables, diagrs. 30*s*.

Will form a useful work of reference for architects and others who do not possess a specialized knowledge of the subject. *A–B*

WILLIS, A. J. 311
Specification writing for architects and surveyors. 2nd ed. rev. Crosby Lockwood, 1958. xii,13–88pp. 9*s*. 6*d*.

Previous ed. 1953. Contains amended references to British standards. *B*

9 GEOGRAPHY. BIOGRAPHY. HISTORY

91 GEOGRAPHY

SKELTON, R. A. 312
Explorers' maps: chapters in the cartographic record of geographical discovery. R & KP, 1958. xi,337pp., illus., maps, bibliog. 63*s*. *A*

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A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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001.8 Methodology

GODFREY, J. W. *and* PARR, G. 313
The technical writer: an aid to the presentation and production of technical literature. C & H, 1959. 340pp., illus., plates, tables, diagrs., bibliog. 45*s*.

An excellent book that should be studied by every technical writer and editor. Full of factual information on every aspect of the preparation of technical publications. *B–C*

5 NATURAL SCIENCES

51 MATHEMATICS

ANDREE, R. V. 314
Selections from modern abstract algebra. Constable, 1959. xii,212pp., tables, diagrs., bibliog. 42*s*.

An admirable choice of topics for an introductory course. A particular feature is the variety of applications to engineering, psychology, etc. *B*

GUMBEL, E. J. 315
Statistics of extremes. N.Y., Columbia University P., 1958; London, OUP, 1959. xxi,375pp., tables, diagrs., bibliog. $15 or 120*s*. *C*

MASSEY, H. S. W. *and* KESTELMAN, H. 316
Ancillary mathematics. Pitman, 1959. xvi,990pp., plates, diagrs. 75*s*.

A thoroughgoing survey for first-year students in physics who already have a knowledge of pure mathematics to G.C.E. (A) level, but assumes no previous knowledge of applied mathematics. *B*

MAXWELL, E. A. 317
Fallacies in mathematics. Cambridge, CUP, 1959. 96pp., diagrs. 13*s*. 6*d*.

Fallacies in algebra, geometry, and elementary calculus are examined in detail and the roots of these errors exposed. Of great value to the sixth form teacher. *B*

PAGE, C. H. 318
The algebra of electronics. Princeton (N.J.), [etc.], London, Van Nostrand, 1958 [i.e. Jan. 1959]. x,258pp., diagrs. $8.75 or 66*s*.

Basic mathematics of electronic circuits and networks for technicians and radio servicemen without formal mathematical training above an elementary level. *B*

PITT, H. R. 319
Tauberian theorems. OUP for the Tata Institute of Fundamental Research, Bombay, 1958. x,174pp., bibliog. 37*s*. 6*d*. *Tata Institute of Fundamental Research monographs on mathematics and physics; gen. eds H. J. Bhabha and K. Chandrasekharan.*

Research monograph in which the main lines of a theory, due mainly to Hardy, Littlewood, and Wiener, are concisely exhibited by one who has made substantial contributions in this field. *C*

52 ASTRONOMY

BOK, B. J. 320

The astronomer's universe: based on lectures given at the Canberra University College, October 1957, under the auspices of the Australian National University, and at the summer school organized by Professor H. Messel, School of Physics, University of Sydney, January 1958, under the auspices of the Nuclear Research Foundation. Melbourne, Melbourne University P.; London, CUP, 1958. xi,107pp., plates, diagrs., bibliog. 21*s*.

Discusses recent developments in astronomy in non-technical terms. *B*

53 PHYSICS

DERESIEWICZ, H. 321

Elements of engineering statics. N.Y., Columbia University P., 1958; London, OUP, 1959. vi,124pp., diagrs. $3.50 or 28*s*.

Provides intermediate engineering students with understanding of the fundamental principles of statics and means to develop facility in solving engineering problems. *B*

ECKERT, E. R. G. 322

Heat and mass transfer. 2nd ed. with Part A, heat conduction and appendix of property values, by R. M. Drake. N.Y., [etc.], London, McG-H, 1959. xiv, 520pp., illus., plate, tables, diagrs., bibliog. $12.50 or 97*s*. *McGraw-Hill series in mechanical engineering, ed. by R. M. Drake and S. J. Kline.*

Previous ed. 1950 as *Introduction to the transfer of heat and mass.* *B*

323

HIGH speed aerodynamics and jet propulsion; vol. 3, fundamentals of gas dynamics, ed. by H. W. Emmons. OUP, 1958. xiv,750pp., plates, tables, diagrs., bibliog. 140*s*.

Surveys the aerodynamic problems of high-speed flight. Brings together the basic theoretical information now available on aerodynamics, jet propulsion, and in the new field of gas dynamics. *C*

HOFF, N. J., *ed.* 324

High temperature effects in aircraft structures. London, [etc.], Los Angeles, Pergamon P. for Advisory Group for Aeronautical Research and Development, Nato, 1958. viii,358pp., plates, tables, diagrs., bibliogs. 70*s*. or $12. *Agardograph 28.*

May be regarded as the most authoritative review, so far produced, on the subject of aerodynamic heating. Well illustrated with photographs and numerous diagrams. *C*

IOFFE, A. F. 325

Semiconductor thermoelements and thermoelectric cooling; tr. [from the Russian] by A. Gelbtuch, ed. by H. J. Goldsmid. Infosearch, 1959. [8],184pp., illus., tables, diagrs. 42*s*. or $6.

Translation of *Poluprovodnikovye Termoelementy*, 1956 and *Termoelektricheskoe Okhlazhdenie*, 1956, originally published by U.S.S.R. Academy of Sciences. Revised and supplemented by A. F. Ioffe for English edition. Describes technical applications of the Peltier and Seebeck effects in regard to development of new semi-conducting material for thermoelements which, it is claimed, is likely to revolutionize refrigeration, air conditioning, and domestic heating. *C*

MOSS, T. S. 326

Optical properties of semi-conductors. London, Butterworths; N.Y., Academic P., 1959. x,279pp., tables, diagrs., bibliog. 50*s*. or $9. *Semi-conductor monographs, ed. by C. A. Hogarth.*

A clearly written, up-to-date text on optical properties of semiconductors written primarily for the experimental physicist by a leading authority. *C*

PITCHFORD, A. 327
Studies in geometrical optics. Macdonald, 1959. viii,222pp., diagrs. 32*s*. 6*d*.

Covers the theory of thin and thick lenses, and lens aberrations, to advanced and scholarship levels in G.C.E., and is of value to those preparing for the diploma examinations of the British Optical Association or of the Worshipful Company of Spectacle Makers. *B*

RATCLIFFE, J. A. 328
The magneto-ionic theory and its applications to the ionosphere: a monograph. Cambridge, CUP, 1959. xii,206pp., tables, diagrs., bibliog. 40*s*.

Draws principally on published information giving the derivation and interpretation of the relevant equations and applying them to the terrestrial ionosphere. *C*

THOMSON, J. *and* CALLICK, E. B. 329
Electron physics and technology. EUP, 1959. xiv,527pp., tables, diagrs., bibliog. 50*s*. *Physical science texts, ed. by Sir G. Sutton.*

A sound modern text on basic principles of electron physics for students of physics and electrical engineering to honours level, and for the professional man. *B*

539.1 Nuclear physics

CURTISS, L. F. 330
Introduction to neutron physics. Princeton (N.J.), [etc.], London, Van Nostrand, [1959]. xii,380pp., illus., tables, diagrs., bibliog. $9.75 or 73*s*. *Nuclear science series, ed. by J. G. Beckerley.*

The first of a new series designed as reference books. Emphasis is on experimental methods and results rather than on detailed theoretical treatment. No advanced mathematical knowledge is required and line drawings are used freely. Presentation is clear and authoritative, documentation quite full and detailed. *B*

JACKSON, J. D. 331
The physics of elementary particles. Princeton (N.J.), Princeton University P.; London, OUP, 1958. x,136pp., tables, diagrs. $4.50 or 30*s*. *Investigations in physics, no. 9, ed. by E. P. Wigner and R. Hofstadter.*

This volume in a valuable series gives a concise and brief account of the theory of various properties and interactions of pions, K and Mu mesons, and hyperons, and of various decay processes. Treatment is authoritative. Suitable for non-specialist physicist graduates training in quantum mechanics. Clear line drawings and good documentation. *C*

54 CHEMISTRY

EMMETT, P. H., *ed.* 332
Catalysis; volume 6, alkylation, isomerization, polymerization, cracking and hydroreforming. N.Y., Reinhold; London, C & H, 1958. vi,706pp., tables, diagrs., bibliog. $19.50 or 156*s*.

Deals with the various forms of 'hydrocarbon catalysis'. Topics are thoroughly and authoritatively discussed and fully documented. Most valuable to research workers. *C*

KETELAAR, J. A. A. 333
Chemical constitution: an introduction to the theory of the chemical bond. 2nd ed. rev. Amsterdam, London, [etc.], Elsevier, 1958 [i.e. Jan. 1959]. viii,448pp., tables, diagrs., bibliog. 47*s*. 6*d*. or $8.95.

Deals essentially with the application of quantum theory to the chemical and physical properties of chemical compounds. 2nd ed. has undergone considerable revision. New topics from the fields of inorganic, organic, and physical chemistry have been introduced. Particularly valuable to undergraduate students. *B*

548 Mineralogical sciences

LAWSON, W. D. *and* NIELSEN, S. 334
Preparation of single crystals. London, Butterworths; N.Y., Academic P., 1958. vii,255pp., plates, tables, diagrs. 45*s*. or $8.80. *Semi-conductor monographs; gen. ed. C. A. Hogarth.*

Comprehensive and lucid account of preparation of single crystals and metals, with good theoretical treatment. Well illustrated and documented. *C*

55 GEOLOGY

HEINRICH, E. W. 335
Mineralogy and geology of radioactive raw materials. N.Y., [etc.], London, McG-H, 1958. xiv,654pp., illus., tables, diagrs., bibliog. $14.50 or 112*s*. 6*d*.

One of the few books combining a detailed mineralogy with the geology of uranium and thorium. *B–C*

WELLS, A. K. 336
Outline of historical geology. 4th ed. rev. with assistance of J. F. Kirkaldy. Murby, 1959. xvi,400pp., illus., plate, tables, diagrs., bibliog. 32*s*.

Previous ed. 1951. A standard undergraduate textbook which incorporates work published in the current decade and remains a lucid introduction to British stratigraphy. *A*

58 BOTANY

HULTÉN, E. 337
The amphi-Atlantic plants and their phytogeographical connections, with 279 maps. Stockholm, Almqvist & Wiksell, 1958. 340pp., maps, bibliogs. *Kr*. 78.50. *Kungl. Svenska Vetenskapsakademiens handlingar fjärde serien; band 7, nr. 1.*

A most valuable reference source for all botanists interested in the distribution of plants in the north temperate and arctic zones. Extensive bibliographies. *C*

6 APPLIED SCIENCES

61 MEDICAL SCIENCES

BOVET, D. *and others, eds* 338
Curare and curare-like agents, ed. by D. Bovet, F. Bovet-Nitti, and G. B. Marini-Bettolo. Amsterdam, London, [etc.], Elsevier, 1959. xii,478pp., illus., tables, diagrs. 85*s*. or $15.75.

Distributed in British Commonwealth and U.S.A. by Van Nostrand. Reports, in full, a symposium held in Rio de Janeiro in August 1957. Covers all aspects of the chemistry of these compounds, their biological properties, clinical applications, etc. A valuable source of reference. Papers are in either English or French, all fully documented. *C*

62 ENGINEERING

JURY, E. I. 339
Sampled-data control systems. N.Y., Wiley; London, C & H, 1958. xvi,454pp., tables, diagrs., bibliog. $16 or 128*s*.

A specialized treatise forming a graduate course in the field of control systems; it presupposes a knowledge of feedback system theory and operational circuit analysis. *C*

620.1 Strength of materials

DURELLI, A. J. *and others* 340
Introduction to the theoretical and experimental analysis of stress and strain, by A. J. Durelli, E. A. Phillips, and C. H. Tsao. N.Y., [etc.], London, McG-H, 1958. xxx,498pp., illus., tables, diagrs. $12.50 or 97*s*. *McGraw-Hill series in mechanical engineering, ed. by R. M. Drake and S. J. Kline.*

Advanced textbook intended to give an adequate background for experimental work. All three authors are engaged in research, in different fields. *C*

POPE, J. A., *ed.* 341
Metal fatigue. C & H, 1959. xiv,382pp., plates, tables, diagrs. 70*s*.
Presents a comprehensive view of metal fatigue which should prove a useful source of reference to engineers in many industries. *B*

SINES, G. *and* WAISMAN, J. L., *eds* 342
Metal fatigue. N.Y., [etc.], London, McG-H, 1959. x,415pp., illus., tables, diagrs., bibliog. $12.50 or 97*s*. *University of California engineering extension series.*
Contains many excellent chapters written by experts in this important subject. *C*

SOCIETY OF CHEMICAL INDUSTRY 343
The protection of motor vehicles from corrosion: comprising papers read at a symposium organized by the Corrosion Group held in the Institution of Mechanical Engineers, London, S.W.1, 11–12 March 1958. Society of Chemical Industry, 1958 [i.e. Feb. 1959]. iv,229pp., illus., tables, diagrs. 22*s*. 6*d*. *Monographs, no. 4.*
Suggests various methods of protecting vehicle metal surfaces from corrosion, with particular emphasis on the most suitable protective measures compatible with economy. *C*

621 Mechanical engineering

COATED ABRASIVES MANUFACTURERS' INSTITUTE 344
Coated abrasives—modern tool of industry. N.Y., [etc.], London, McG-H, 1958. v,426pp., illus., tables, diagrs. $8.50 or 66*s*. *B*

621.3 Electrical engineering

EISLER, P. 345
The technology of printed circuits: the foil technique in electronic production. Heywood, 1959. x,405pp., illus., tables, diagrs., bibliog. 60*s*.
A technically competent and thorough survey of electronic circuit printing and its development. Appendices and bibliography are comprehensive and invaluable to students of this technology for further study. *B*

FREEBODY, J. W. 346
Telegraphy. Pitman, 1959. xii,738pp., illus., tables, diagrs., bibliog. 80*s*.
Indispensable book of reference for students, engineers, and everyone interested in the subject. *B*

PULLEN, K. A. 347
Conductance design of active circuits. N.Y., Rider, 1959. xiv,330pp., illus., tables, diagrs., bibliog. $9.95.
Theory and mathematics of conductance technique are explained and used to simplify the treatment of active circuits using valves or transistors. *B*

SWANN, H. W. 348
Electrical safety. Macdonald, 1959. xii,292pp., illus., tables, diagrs. 40*s*.
An authoritative book on British safety requirements and measures, based on the Factory Electricity Regulations, by a former H.M. Senior Electrical Inspector of Factories. *B*

TEPPER, M. 349
Fundamentals of radio telemetry. N.Y., Rider, 1959. xii,116pp., illus., tables, diagrs., bibliog. $2.95.
Covers principles of transmission and recording of information from a distance, e.g. from a guided missile. Pre-supposes a knowledge of electronics but is well illustrated with picture diagrams. *B*

624 Civil engineering

ASHDOWN, A. J. 350
The design of prismatic structures. Rev. and enl. ed. Concrete Publs., 1958 [i.e. Jan. 1959]. vi,85pp., tables, diagrs. 9*s*. *Concrete series.*

Previous ed. 1951. Covers single-span and multiple-bay structures, continuous structures, structures with sloping ends, and slabs with small angular change. *C*

MORICE, P. B. 351
Linear structural analysis: an introduction to the influence coefficient method applied to statically indeterminate structures. Thames & Hudson, 1959. xii, 170pp., tables, diagrs. 35*s*.

Most valuable book for advanced students and civil engineers by a professor of civil engineering long familiar with the subject. *C*

VIEST, I. M. *and others* 352
Composite construction in steel and concrete for bridges and buildings, by I. M. Viest, R. S. Fountain, R. C. Singleton. N.Y., [etc.], London, McG-H, 1958. xv,176pp., tables, diagrs. $7.50 or 58*s*.

Design of steel beams and concrete slabs for composite construction and methods of connection. *C*

629 Transport engineering

BARKER, A. *and others* 353
Jets and rockets, by A. Barker, T. R. F. Nonweiler, and R. Smelt. C & H, 1959. xiv,268pp., illus., tables, diagrs., bibliog. 35*s*.

Reviews the aerodynamic problems associated with high-speed flight, and also contains information on various jet propulsion systems. *B*

DOW, R. B. 354
Fundamentals of advanced missiles. N.Y., Wiley; London, C & H, 1958. xvi, 568pp., plate, tables, diagrs. $11.75 or 94*s*. *Wiley books in space technology.*

Gives basic principles necessary for calculating the performance of guided missiles and space vehicles. *C*

63 AGRICULTURE

BRITISH WEED CONTROL COUNCIL 355
Weed control handbook, with a preface by H. G. Sanders. Oxford, Blackwell Scientific, 1958. viii,248pp., tables, diagrs. 12*s*. 6*d*.

Provides an authoritative guide to the use of chemical weed killers including their chemistry, modes of application, uses, etc., intended for all concerned with the production and application of these substances. *C*

GREAT BRITAIN. Department of Scientific and Industrial Research. Forest Products Research Laboratory 356
Decay of timber and its prevention, by K. St G. Cartwright and W. P. K. Findlay. 2nd ed. HMSO, 1958. xvi,332pp., plates, tables, diagrs. 27*s*. 6*d*.

First ed. 1946. New edition gives separate chapters to the fungi of standing conifers and standing broad-leaved trees. New references are added and all data brought up to date and enlarged. *A–B*

HAYES, G. 357
Farm organization and management. Lockwood, 1959. x,333pp., tables, diagrs. 25*s*. *Agricultural and horticultural series.*

Clear introduction to farm management. Well documented, with many graphs and tables. For students and farmers wishing to estimate the value of alternative systems. *B*

HUGGARD, E. R. *and* OWEN, T. H. 358
Forest machinery. Black, 1959. xii,192pp., illus., tables, diagrs. 24*s*.

A complete list of machinery available for forest operations with descriptions and notes in readable form. A chapter on machine operating costs is particularly useful. Well illustrated; well indexed. *A*

MARTIN, H. 359
The scientific principles of crop protection. 4th ed. Edward Arnold, 1959. viii, 360pp., diagrs. 65*s*.

Previous ed. 1940. Previously known as *The scientific principles of plant protection.* Thoroughly revised, especially as regards important developments in chemical methods. A valuable introduction for students and research workers. *B*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

CASE INSTITUTE OF TECHNOLOGY. Engineering Research Department. 360
Operations Research Group
A comprehensive bibliography on operations research through 1956, with supplement for 1957. N.Y., Wiley; London, C & H, 1958. xi,188pp., table. $6.50 or 52*s*. *Operations Research Society of America, publications in operations research, no. 4.* *D*

NEVILLE, H. H. *and* YUILL, W. E. 361
Translation from German for chemists. N.Y., Interscience; London, Glasgow, Blackie, 1959. xii,140pp., tables. 15*s*.

Assumes no knowledge of German and aims to present the grammar and vocabulary necessary for an intelligent use of the dictionary. *B*

66 CHEMICAL TECHNOLOGY

BRITISH IRON AND STEEL RESEARCH ASSOCIATION. Ingot Surface Defects 362
Sub-Committee
Surface defects in ingots and their products (recommended definitions). 2nd ed. Iron & Steel Institute, 1958. [4],58pp., illus., diagrs. 25*s*. *Iron & Steel Institute; special reports, no. 63.*

Previous ed. 1951. Highly recommended. *B*

HAUSNER, H. H., *ed.* 363
Modern materials: advances in development and applications; vol. 1, 1958. N.Y., London, Academic P., 1958. xii,402pp., illus., tables, diagrs., bibliogs. $12.50 or 89*s*. 6*d*.

First volume of a new series: contains eight sections, each written by a specialist, covering wood, synthetic rubber, fibres, insulation paper, special glasses, ceramics, germanium and silicon, and zirconium. *C*

PAIST, W. D. 364
Cellulosics. N.Y., Reinhold; London, C & H, 1958. xii,270pp., illus., tables, diagrs. $5.75 or 46*s*. *Reinhold plastics applications series.*

A survey of the applications of cellulose-based products in the fields of plastics, fibres, films, lacquers, and adhesives. *A*

365
SOVIET research in fused salts 1956: in English translation. Consultants Bureau Inc., 1958. 2v. Illus., tables, diagrs., $40 per set. *Chemistry collection series.*

Part 1; systems (binary, ternary, quaternary reciprocal), $30. Part 2; electrochemistry, aluminium and magnesium, corrosion, theoretical; thermodynamics; slags and mattes, $20. Forty papers. *C*

67/68 MANUFACTURES

DONNITHORNE, A. G. 366
British rubber manufacturing: an economic study of innovations. Duckworth, 1958. 159pp., tables, bibliog. 25*s*. *Industrial innovation series.*

The object of this study is to examine the relationship between innovations (original inventions and their development for practical use) in the rubber manufacturing industry of the United Kingdom, and the structure of that industry. *A*

681 Precision mechanisms

VON NEUMANN, J. 367
The computer and the brain. New Haven (Conn.), Yale University P.; [London, OUP], 1958. xiv,82pp. $3 or 24*s*. *Silliman memorial lectures, 1957.* *C*

69 BUILDING

HOCKLEY, C. H. 368
Concrete practice. Chatto & Windus, 1959. xii,100pp., plates, tables, diagrs. 12*s*. 6*d*.

Useful to technical students during their first year. *B*

MCKELVEY, K. K. *and* BROOKE, M. 369
The industrial cooling tower: with special reference to the design, construction, operation, and maintenance of water cooling towers. Amsterdam, London, [etc.], Elsevier, 1959. xviii,430pp., illus., tables, diagrs., bibliog. 47.50 *fl*. or 90*s*.

Distributed by Van Nostrand. Attempts a survey of the whole field of the design, construction, etc., of the towers, taking into account international reports of research and experience. *B–C*

VOSS, W. C. 370
Construction management and superintendence. Princeton (N.J.), [etc.], London, Van Nostrand, 1958 [i.e. Jan. 1959]. viii,238pp., tables, diagrs., bibliog. $6.95 or 39*s*. 6*d*. *Technical series on building construction, ed. by W. C. Voss.*

Deals with the division of duties, responsibilities, and procedures among the owner, the architect, and the contractor and describes the supervision of each of thirteen trades by superintendents and clerks of works. *A*

7 FINE ARTS

72 ARCHITECTURE

BAKER, G. *and* FUNARO, B. 371
Parking. N.Y., Reinhold; [London, C & H], 1958. [6],202pp., illus., tables, diagrs. $9.50 or 76*s*.

Parking problem is analysed and planning and engineering aspects of its solution are considered. Many photographs and diagrams illustrate the construction and layout of parking garages. *A & C*

MILLS, E. D. 372
The modern factory. 2nd ed. rev. and enl. Architectural P., 1959. 216pp., illus., tables, diagrs., bibliog. 36*s*.

Previous ed. 1951. *A*

77 PHOTOGRAPHY

ALLEN, R. M. 373
Photomicrography. 2nd ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1958 [i.e. Jan. 1959]. xiv,441pp., illus., tables, diagrs. $9 or 67*s*. 6*d*.

First ed. 1941. A valuable manual for professional and amateur, now brought up to date. Emphasis on American equipment. *B*

Publishers

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A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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John Baskerville: a bibliography. Cambridge, CUP, 1959. xxiv,72pp., plates. 63*s*.

Two pages of type specimens as insert. *B*

INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION *and* INTERNATIONAL POLITICAL SCIENCE ASSOCIATION 375
International bibliography of political science; vol. 6, works published in 1957, ed. by J. Meynaud. Paris, Unesco, 1959. 350pp. 30*s*. *Documentation in the social sciences.* *D*

INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION *and* INTERNATIONAL SOCIOLOGICAL ASSOCIATION 376
International bibliography of sociology; vol. 7, works published in 1957. Paris, Unesco, 1959. 270pp. 25*s*. *International social sciences bibliographies.* *D*

MOVSOVIC, M. I. 377
Technical and vocational education in the USSR: a bibliographical survey. Paris, Unesco, 1959. 53pp. 5*s*. *Educational studies and documents, no. 30.*

Works are arranged in sections according to the various levels of vocational education in the USSR. All items are fully annotated. *D*

VIRGINIA. University. Bibliographical Society 378
Studies in bibliography: papers of the Bibliographical Society of the University of Virginia, ed. by F. Bowers; vol. 12. Charlottesville, the Society, 1959. $10. *B*

WUSTER, E. 379
Bibliography of monolingual scientific and technical glossaries; vol. 2, miscellaneous sources. Paris, Unesco, 1959. 146pp. 12*s*. 6*d*.

Volume 1 appeared in 1955. The second volume contains over a thousand references to glossaries published privately. *D*

1 PHILOSOPHY

POPPER, K. R. 380
The logic of scientific discovery. Hutchinson, 1959. 480pp., diagrs. 50*s*.

One of the most important contributions to the analysis of scientific theories, based on the author's conception of the falsifiability, as opposed to the verifiability, concept of inductive logic. *C*

3 SOCIAL SCIENCES

AMERICAN SOCIETY OF COMPOSERS, AUTHORS AND PUBLISHERS 381
Copyright law symposium, no. 9. N.Y., Columbia University P.; London, OUP, 1959. xvi,212pp. 35*s*.

A collection of five papers on various aspects of copyright, together with a list of statutes and cases, and works cited. *B*

33 ECONOMICS

BRITTAIN, *Sir* H. 382
The British budgetary system. A & U, 1959. 320pp., illus. 25*s*.
Detailed examination of current practice. *B*

HAW, R. C. 383
The conservation of natural resources. Faber, 1959. 256pp., plates, tables, diagrs., bibliog. 30*s*.
Theoretical and practical aspects of the subject are thoroughly covered. Of special interest to tropical agriculturalists. Well illustrated. *A–B*

WOOD, J. 384
A simple guide for the taxpayer. Putnam, 1959. 102pp., tables. 9*s*. 6*d*.
Introduction to taxation, with hints on how to make returns, claim relief-exemptions on all types of income up to 1958–9 financial year. A good investment for all who pay income tax. *A*

36 WELFARE AND INSURANCE

ELDERTON, *Sir* W. P. *and others* 385
The construction of mortality and sickness tables: a primer, by Sir W. Elderton, R. C. Fippard, and E. B. O. Sherlock. 5th ed. Black, 1959. vii,130pp., illus., tables. 10*s*. 6*d*.
Previous ed. 1948. Approach is simple, formulae being excluded. *B*

37 EDUCATION

COLLIER, K. G. 386
The social purposes of education. R & KP, 1959. xvi,236pp., tables, diagrs., bibliog. 21*s*. *International library of sociology and social reconstruction, ed. by W. J. H. Sprott.*
An exploration of the sources of the values that shape educational judgements. *B*

387
DIRECTORY of opportunities for school leavers, 1959, ed. by C. Labovitch, with a preface by the Rt Hon. the Viscount Monckton of Brenchley. Cornmarket P., 1959. 188pp., tables. 8*s*. 6*d*. (paper 5*s*.).
Trade distributors, Bowes & Bowes. Directory of openings for employment and prospects offered by 134 industrial and commercial organizations and government departments, with an editorial section of eleven articles giving valuable advice. *D*

LEVIN, D. 388
Soviet education today. Staples P., 1959. [6],170pp. 15*s*.
A survey of teaching methods and practice with syllabuses for different types of school. *A*

RAYBOULD, S. G., *ed.* 389
Trends in English adult education. Heinemann, 1959. xiv,258pp., tables, bibliog. 21*s*.
A series of nine essays by authors concerned with adult education. Includes topics which range from the work of the W.E.A. to educational broadcasting, and from trade union education to university extension. *A–C*

SILBERTSON, D. M. 390
Youth in a technical age: a study of day release. Parrish, 1959. 228pp., tables, bibliog. 21*s*. *B*

4 PHILOLOGY

391

DICTIONARY of spoken Russian: Russian–English, English–Russian. N.Y., Dover Publs.; London, Constable, 1958. viii,574pp. $2.75 or 22*s*.

Very comprehensive phrase dictionary, intended for more advanced students, but makes an interesting possession for anyone learning colloquial Russian. With grammar appendixes. *D*

JORGENSEN, P. 392

German grammar 1; rev. ed.; tr. by G. Kolisko in consultation with the author, and with F. P. Pickering. London, Melbourne, Toronto, Heinemann, 1959. xiv,246pp., tables. 25*s*.

A descriptive grammar of modern German. Very well furnished with examples from literature and covering forms of usage but not prepositions or syntax. *C*

5 NATURAL SCIENCES

53 PHYSICS

ANDRADE, E. N. DA C. 393

An approach to modern physics. 2nd ed. rev. and enl. Bell, 1959. x,254pp., plates, diagrs. 27*s*. 6*d*.

First published 1956. A compact and readable account which ranges widely through experimental and theoretical physics. In this edition such recent topics as parity, Cherenkov radiation, nuclear fusion, and isotopes are included. *A*

BIRKS, J. B. *and* SCHULMAN, J. H., *eds* 394

Progress in dielectrics; vol. 1. Heywood, 1959. x,313pp., plates, tables, diagrs., bibliogs. 70*s*.

Contains seven critical reviews relating to the breakdown and insulating properties of solids, liquids, and gases, ferro-electric properties of barium titanate crystals, non-oxide ceramics, and electrophoretic deposition of insulation. *C*

CARSLAW, H. S. *and* JAEGER, J. C. 395

Conduction of heat in solids. 2nd ed. Oxford, Clarendon P., 1959. x,510pp., tables, diagrs. 84*s*.

Revision, expansion, and extension of the classic text of 1946. New chapter on integral transform notation, and numerical methods. *C*

FANO, U. *and* FANO, L. 396

Basic physics of atoms and molecules. N.Y., Wiley; London, C & H, 1959. xvi,414pp., illus., tables, diagrs. $10 or 80*s*.

A presentation of quantum physics which aims to make the subject intelligible to those not specially trained in physics and mathematics. Designed as introductory course for physics, chemistry, and engineering students in the U.S.A., should be valuable for the same purpose in this country. *B*

ROUSE, H., *ed.* 397

Advanced mechanics of fluids. N.Y., Wiley; London, C & H, 1959. xv,444pp., tables, diagrs., bibliog. $9.75 or 78*s*. *C*

SMALL, J. 398

First steps in heat transfer. London, Glasgow, Blackie, 1959. viii,86pp., tables, diagrs., bibliog. 12*s*. 6*d*.

Useful introduction to the subject at undergraduate level. *B*

WHITE, G. K. 399
Experimental techniques in low-temperature physics. Oxford, Clarendon P., 1959. viii,328pp., plates, tables, diagrs., bibliogs. 45*s*. *Monographs on the physics and chemistry of materials; gen. eds W. Jackson, H. Frohlich, N. F. Mott, E. C. Bullard.*

Of special interest to experimental physicists interested in the design of equipment in low-temperature laboratories. *C*

54 CHEMISTRY

HONEYMAN, J., *ed.* 400
Recent advances in the chemistry of cellulose and starch. Heywood, 1959. viii, 358pp., plate, tables, diagrs., bibliog. 60*s*.

An authoritative review by fourteen contributors, with the emphasis on developments in cellulose. Should be of interest to polymer as well as carbohydrate chemists. *C*

TOPCHIEV, A. V. *and others* 401
Boron fluoride and its compounds as catalysts in organic chemistry, by A. V. Topchiev, S. V. Zavgorodnii, and Ya. M. Paushkin; tr. from the Russian by J. T. Greaves. London, [etc.], Los Angeles, Pergamon P., 1959. 326pp., tables, diagrs., bibliog. 80*s*. or $12. *International series of monographs on organic chemistry; gen. eds W. Doering and D. H. R. Barton; vol.* 2.

A comprehensive, well-written, well-translated treatise including particularly the use of boron fluoride as a catalyst in numerous chemical reactions. World literature is covered very fully. *B–C*

TROTMAN-DICKENSON, A. F. 402
Free radicals: an introduction. London, Methuen; N.Y., Wiley, 1959. [6], 142pp., tables, diagrs., bibliog. 12*s*. 6*d*. *Methuen's monographs on chemical subjects; gen. eds H. J. Emeléus and D. W. G. Style.*

Brief introductory review of the subject. Deals with the production, properties, and various reactions of radicals, without concentration of any particular limited field. *B*

WHEATLEY, P. J. 403
The determination of molecular structure. Oxford, Clarendon P., 1959. viii, 264pp., illus., tables, diagrs., bibliogs. 35*s*.

Deals with spectroscopic, diffraction, and other methods for determining the structure of molecules. Useful for the non-specialist interested in the subject. *B*

55 GEOLOGY

JEFFREYS, *Sir* H. 404
The earth: its origin, history, and physical constitution. 4th ed. Cambridge, CUP, 1959. xvi,420pp., plates, tables, diagrs., bibliog. 75*s*.

Previous ed. 1952. The distinguished author of this geophysical classic has now included important additional information which brings the work substantially up to date. *C*

SWINEFORD, A., *ed.* 405
Clays and clay minerals: proceedings of the sixth national conference on clays and clay minerals; sponsored by Committee on Clay Minerals of the National Academy of Sciences—National Research Council and University of California Berkeley, California, August 19–23, 1957. London, [etc.], Los Angeles, Pergamon P., 1959. x,412pp., plates, tables, diagrs. 60*s*. or $8.50. *International series of monographs on earth sciences, ed. by E. Ingerson; vol. 2.* *C*

57 BIOLOGY

BARNES, H. 406
Oceanography and marine biology: a book of techniques. A & U, 1959. 220pp., illus., diagrs., bibliog. 35*s*.

A clearly written, much-needed handbook for the new oceanographer, and condensed reference book for those with experience, as up to date as is concomitant with a lag between writing and publishing. *A–B*

CLEGG, J. 407
The freshwater life of the British Isles: a guide to the plants and invertebrates of ponds, lakes, streams, and rivers, with an additional chapter on the vertebrates; with 16 plates in full colour and 51 half-tone plates from photographs by the author. 2nd ed. F. Warne, [1959]. 352pp., illus., plates, diagrs., bibliog. 21*s*. *Wayside and woodland series.*

First published 1952. A good, scientifically planned yet easily followed handbook. Illustrations are excellent as are the description of methods of collection and identification. *A–B*

HEISS, [E. D.] *and* LAPE, [R. H.] 408
Activities in biology: combined workbook and laboratory manual to accompany *Biology—a basic science*. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. x,284pp., tables, diagrs. $2.24 or 17*s*.

Clear, well illustrated, and contains several original ideas in presentation. Designed to suit a large class of varying ability. Conscientiously used it should result in a thorough knowledge of elementary biology. *B*

MELLERSH, H. E. L. 409
The story of man: human evolution to the end of the Stone Age; ill. by S. Mellersh. Hutchinson, 1959. 256pp., illus., plates, diagrs., bibliog. 21*s*.

An interesting survey of the development of man from the primitive ape-man. The wealth of evidence adduced indicates the breadth of the author's knowledge. Well-balanced and essentially readable book. *A–B*

410
PROGRESS in industrial microbiology; vol. 1, ed. by D. J. D. Hockenhull. Heywood, 1959. viii,248pp., illus., plates, tables, diagrs., bibliog. 50*s*.

The first volume of an annual series. Well documented, with references to the original literature. Will be of great assistance to research workers and others concerned with the field of industrial microbiology. *C*

59 ZOOLOGY

BALDUF, W. V. 411
Obligatory and facultative insects in rose hips; their recognition and bionomics. Urbana (Ill.), University of Illinois P., 1959. vi,194pp., plates. $4.50. *Illinois biological monographs, no. 26.*

The results of an investigation into the types of insects which depend more or less on rose hips for food or shelter, their bionomic relations to the hip or each other, and the life histories of each species. *B*

RUCH, T. C. 412
Diseases of laboratory primates; with the editorial assistance of M. W. Terry. Philadelphia, London, Saunders, 1959. xxvi,600pp., illus., tables, diagrs., bibliog. $7.50 or 52*s*. 6*d*.

A timely and comprehensive survey of primate disease and therapy which is well illustrated and has profuse references. Likely to become the definitive text in a field which needs one. *C*

SCHECHTER, V. 413
Invertebrate zoology. Englewood Cliffs (N.J.), [London], Prentice-Hall, 1959. xiv,530pp., illus., diagrs., bibliog. $6.95 or 63*s*. *Animal science series, ed. by H. B. Steinbach.*

Clear and readable account that presents only the essentials of invertebrate anatomy and physiology. Linked with American types it will nevertheless provide stimulating reading to other English-reading undergraduates. *B*

USINGER, R. L. *and* MATSUDA, R. 414
Classification of the Aradidae (Hemiptera–Heteroptera). British Museum (Natural History), 1959. vii,410pp., illus., plates, tables, diagrs., bibliog. 80*s*.

Generic classification of the Aradidae, commonly known as flat bugs, with lists of species, but new species described only when necessary for the establishment of new genera. *B*

6 APPLIED SCIENCES

KLEMM, F. 415
A history of western technology; tr. [from the German] by D. W. Singer. A & U, 1959. 402,[2]pp., illus., plates, tables, diagrs., bibliog. 32*s*.

First published as *Technik: eine geschichte ihrer probleme*. Verlag Karl Alber, 1954. The only English work giving a collection of texts in the history of technology. An excellent source book. *B*

RAVEN, C. P. 416
An outline of developmental physiology; tr. [from the Dutch] by L. de Ruiter. 2nd ed. rev. London, [etc.], Los Angeles, Pergamon P., 1959. viii,224pp., illus., plates, diagrs., bibliog. 25*s*. or $5. *International series of monographs on pure and applied biology: division, zoology; gen. eds J. E. Harris and E. W. Yemm; vol. 1.*

Up-to-date revision of an outstanding introduction to the field of experimental embryology, suitable for students studying zoology and medicine. *B*

62 ENGINEERING

621 Mechanical engineering

621.039 Nuclear engineering

JACOBOWITZ, H. 417
Fundamentals of nuclear energy and power reactors. N.Y., Rider, 1959. [8], 118pp., illus., diagrs. $2.95.

Explains briefly the basic physical concepts and practical applications of nuclear energy, and describes the types of research, and power reactors built and studied in the United States. *B*

TAYLOR, E. O. 418
Nuclear power plant. Newnes, 1959. viii,184pp., tables, diagrs. 30*s*. *A Newnes technical survey.*

Introduction to the basic principles of nuclear power engineering for engineers, students, and the general reader with some scientific background. *B*

621.7 Workshop practice

ATHERTON, W. H., *ed.* 419
Workshop practice: a practical work for the draughtsman, the mechanic, the pattern-maker, and the foundryman. 3rd ed. [by P. S. Houghton]. New Era Publishing Co., 1959. 9 v. Various pagination, illus., plates, tables, diagrs. 150*s*.

Previous ed. 1942. General standard of the subject matter is good but some of the photographic illustrations are of poor quality. Suitable for students and apprentices. *B*

PICKUP, F. *and* PARKER, M. A. 420
Engineering drawing with worked examples; vol. 2. Hutchinson, 1959. 207pp., tables, diagrs. 21*s*.

Full of information needed by students taking any engineering drawing course and a useful addition to a draughtsman's library. *B*

628 Public-health engineering

ESCRITT, L. B. *and* RICH, S. F. 421
The work of the public health engineer: a textbook on water supply, sewerage, sewage treatment, and the sanitation of buildings (being the the third edition of *The Work of the Sanitary Engineer*, based on the original work by the late A. J. Martin) rewritten and enl. Macdonald & Evans, 1959. xxvi,824pp., illus., tables, diagrs., bibliog. 75*s*. *B*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

651 Office management

DENYER, J. C. 422
Office management. Macdonald & Evans, 1959. xiv,444pp., illus., tables, diagrs., bibliog. 45*s*.

Scope is more extensive than is usual with books on office management. Primarily for those taking professional examinations, but also for office administrators. *B*

657 Accountancy

DE PAULA, F. C. 423
Management accounting in practice: an examination of some of the problems that arise. Pitman, 1959. ix,158pp., illus., diagrs. 18*s*. *B*

SMITH, J. E. *and* DAY, J. C. W. 424
Advanced cost accountancy. Gee, 1959. 170pp., tables. 21*s*.

Of value to student, practitioner, and lecturer. *B*

658 Industrial management

ALLAN, D. H. W. 425
Statistical quality control: an introduction for management. N.Y., Reinhold; London, C & H, 1959. 129pp., tables, diagrs., bibliog. $3.50 or 28*s*. *Reinhold management science series*. *B*

GOODMAN, L. L. 426
Automation today and tomorrow: a technical survey of current progress, with a bibliography of the automatic factory. Iota Services, [1959]. [8],158pp., bibliog. 40*s*.

Distributed by Newman Neame Ltd. Extensive bibliography on technical and management aspects of automation. *B*

HISCOX, W. J. *and* STIRLING, J. 427
Factory administration in practice: organization and administration from the factory standpoint. 7th ed. Pitman, 1959. x,322pp., illus., diagrs. 18*s*.

Previous ed. 1948. Recommended by several professional bodies to students of industrial organization. Part II fully revised and expanded, provides a complementary treatment of the broader aspects of the subject. *B*

HODGES, T. M. 428
Selling in the export market; with a foreword by Sir M. Thomas. Pitman, 1959. xiii,104pp. 16*s*. *A–B*

66 CHEMICAL TECHNOLOGY

429

PROCEEDINGS of the third conference on carbon, held at the University of Buffalo, Buffalo, New York. London, [etc.], Los Angeles, Pergamon P., 1959. x,718pp., illus., tables, diagrs. 140*s*. or $15.

Eighty papers covering a wide range of topics both scientific and technological, relating to the different forms of carbon. Should be of interest to those directly concerned with the subject or working in related fields. *C*

SEARLE, A. B. *and* GRIMSHAW, R. W. 430

The chemistry and physics of clays and other ceramic materials. 3rd ed. ,rev. and enl. Benn, 1959. 944 pp., illus., plates, tables, diagrs. 6 *gns*.

First ed. 1923: previous ed. 1933. Thoroughly revised and improved. *B–C*

TAYLOR, J. 431

Solid propellant and exothermic compositions. Newnes, 1959. x,153pp., illus., plates, tables, diagrs. 25*s*. *Newnes technical survey*.

Comprehensive textbook on the use of chemical energy, in particular explosives, in the service of man. *B–C*

67/68 MANUFACTURES

HALL, A. J. 432

The standard handbook of textiles. 5th ed. National Trade P., 1959. x,350pp., illus., tables, diagrs., bibliog. 35*s*.

Useful to textile students. Revision has added some twenty-seven pages of matter descriptive of the latest developments in fibres and finishes. *B*

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A concise encyclopedia of world timbers. 2nd ed. rev. Technical P., 1959. 264pp., plates, bibliog. 45*s*.

Previous ed. 1948. Describes in detail the structures, characteristics, and uses of nearly 200 different kinds of timbers originating in every part of the world. *D*

7 FINE ARTS

71 TOWN and COUNTRY PLANNING

BURNS, W. 434

British shopping centres: new trends in layout and distribution. Leonard Hill, 1959. [14],129pp., plates, bibliog. 45*s*. *A*

9 GEOGRAPHY. BIOGRAPHY. HISTORY

435

The EUROPA year book, 1959. Europa Publs., 1959. xiv,1156pp., tables. 130*s*.

An extremely useful reference work in two parts. Part I gives details of the major European organizations. Part 2 is arranged alphabetically by country, giving a statistical survey and details of government, press, finance, trade, and the world of learning. *D*

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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Nomenclature of inorganic chemistry: definitive rules for nomenclature of inorganic chemistry; 1957 report of the commission on the nomenclature of inorganic chemistry. Butterworths, 1959. x,94pp., tables. 15*s*.

Text in English and French. *D*

007 Human work

GEORGE, F. H. 437

Automation, cybernetics, and society. Leonard Hill, 1959. [8],283pp., plates, tables, diagrs., bibliogs. 35*s*.

Critical survey of sociological effects of cybernetics as applied in a variety of subjects. *A*

GUILBAUD, G. T. 438

What is cybernetics?; tr. [from the French] by V. MacKay. London, [etc.], Toronto, Heinemann, 1959. viii,126pp., tables, diagrs., bibliog. 10*s*. 6*d*. *Contemporary science books.*

Published as *La Cybernetique*, Paris 1954. Discussion of the fundamental ideas of information theory and control. *A*

02 LIBRARIANSHIP

RANGANATHAN, S. R. 439

Library administration. 2nd ed. Bombay, Asia Publishing, 1959. 678pp. *Rs* 24 or 44*s*.

New and revised edition of a work that first appeared in 1935. Every aspect of library administration is treated in great detail. *B*

3 SOCIAL SCIENCES

37 EDUCATION

MCINTOSH, D. M. 440

Educational guidance and the pool of ability. ULP, [1959]. 199pp., tables, diagrs. 21*s*.

An investigation into the validity of secondary school allocation in Fife. *B*

MORGAN, O. I. 441

The teaching of mathematics in the secondary modern school: a practical guide for the non-mathematician. Harrap, 1959. 144pp., illus., bibliog. 10*s*. 6*d*.

B

MORRIS, J. M. 442
Reading in the primary school: an investigation into standards of reading and their association with primary school characteristics; with a statistical appendix by P. M. Grundy. Newnes for the National Foundation for Educational Research in England and Wales, 1959. xviii,179pp., tables, bibliog. 15*s*. *National Foundation for Educational Research in England and Wales, publications no. 12.*

Report of inquiry carried out in Kent in 1954 on relationships between reading standards and school conditions. *B*

SHARP, J. 443
Educating one nation, with a foreword by H. C. Shearman. Parrish, [1959]. 134pp. 12*s*. 6*d*.

The organization of post-primary education. *A*

444
The TIMES book of careers in industry. London, Glasgow, Blackie, 1959. viii, 141pp., plates. 10*s*. 6*d*.

A collection of short articles describing the nature of the work, methods of training, and prospects in some thirty or so specialized industries, for school-leavers and careers advisers. *A*

5 NATURAL SCIENCES

51 MATHEMATICS

ARROW, K. J. *and others* 445
Studies in linear and non-linear programming, by K. J. Arrow, L. Hurwicz, H. Uzawa. Stanford (Calif.), Stanford University P., 1958; London, OUP, 1959. [8],230pp., tables, diagrs., bibliogs. $7.50 or 60*s*. *Stanford mathematical studies in the social sciences 2; eds K. J. Arrow, S. Karlin, and P. Suppes.*

Research papers on the mathematical theory of the optimum allocation of scarce resources, covering existence theorems, the gradient method for market mechanism in competitive economy, and solutions of particular problems. *C*

BLOM, G. 446
Statistical estimates and transformed beta-variables. Stockholm, Almqvist & Wiksell, 1958; N.Y., Wiley; [London, C & H], 1959. 76pp., tables, bibliog. $5 or *Kr*. 20.

Contains a generalization of Fisher's theory of asymptotic minimum variance, and the theory of beta-variables applied to linear estimation problems. *C*

CHENG, D. K. 447
Analysis of linear systems. Reading (Mass.), London, Addison-Wesley, 1959. xiv,432pp., tables, diagrs. $8.50 or 64*s*. *Electrical engineering series; consulting eds W. H. Huggins and W. A. Lynch.*

Deals with the formulation of equations describing linear systems and their solution by the Laplace transform method. *C*

FRAENKEL, A. A. *and* BAR-HILLEL, Y. 448
Foundations of set theory. Amsterdam, North-Holland, 1958. 410pp. 42 *fl*. *Studies in logic and the foundations of mathematics.*

An encyclopaedic survey of foundation studies from the work of Cantor to the present time. *C*

JAMES, G. *and* JAMES, R. C., *eds* 449
Mathematics dictionary. [2nd ed.]. Multilingual ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. [4],546pp., tables, diagrs. $15 or 112*s.* 6*d.*

Previous ed. 1949. Includes basic terms in modern algebra, number theory, topology, and dynamic programming. There are tables, lists of symbols, and French, German, Russian, and Spanish technical terms. *D*

KULLBACK, S. 450
Information theory and statistics. N.Y., Wiley; London, C & H, 1959. xviii, 395pp., tables, bibliog. $12.50 or 100*s.* *Wiley publications in mathematical statistics, ed. by W. A. Shewhart and S. S. Wilks.*

Logarithmic measures of information studied and applied to testing statistical hypotheses. Reader needs basic knowledge of probability, statistics, and measure theory. *C*

LEWIS, J. P. 451
An introduction to mathematics for students of economics. London, Macmillan; N.Y., St Martin's P., 1959. x,394pp., tables, diagrs. 40*s.* or $10.

Based on a series of lectures given at Cardiff University College, starting simply but reaching an advanced level for the specialist. Includes exercises. *B*

MAY, K. O. 452
Elements of modern mathematics. Reading (Mass.), [London], Addison-Wesley, 1959. xvi,607pp., tables, diagrs. $6.50 or 49*s.* *Mathematics series, ed. by E. Reissner.*

Calculus and probability for students of physical or social sciences, with an introductory section on symbolic logic and set-theory. *B*

RICHMOND, D. E. 453
Introductory calculus. Reading (Mass.), [London], Addison-Wesley, 1959. xv,207pp., diagrs. $5.50 or 42*s.* *Mathematics series, ed. by E. Reissner.*

Short, rigorous course. No knowledge of co-ordinate geometry or trigonometry is assumed. *B*

THOMAS, G. B. 454
Elements of calculus and analytic geometry. Reading (Mass.), [London], Addison-Wesley, 1959. x,580pp., tables, diagrs. $5.50 or 42*s.* *Science education series, ed. by R. S. Peters and others.*

Gentle pace and care in exposition make this a sound introduction. Three-dimensional geometry and calculus with more than one variable are omitted. *B*

ZYGMUND, A. 455
Trigonometric series; vols 1 and 2. 2nd ed. Cambridge, CUP, 1959. Bibliog. 2v. 4 *gns.* each.

First ed. Warsaw, 1935. Vol. 1, xii,384pp.; vol. 2, viii,354pp. Double the size of the first edition; includes work done since 1935 and revision of the original work. *C*

52 ASTRONOMY

BAKER, R. H. 456
Astronomy: a textbook for university and college students. 7th ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. viii,547pp., illus., tables, diagrs., bibliog. $6.95 or 52*s.* 6*d.*

Previous ed. 1955. Revised ed. includes structure of Milky Way and stellar evolution. *B*

DAVIES, R. D. *and* PALMER, H. P. 457
Radio studies of the universe; foreword by A. C. B. Lovell. R & KP, 1959. viii,[4],200pp., plates, tables, diagrs., bibliog. 25*s*.

Introduction to radio-astronomical research for the non-specialist. *A*

FINLAY-FREUNDLICH, E. 458
Celestial mechanics. London, [etc.], Los Angeles, Pergamon P., 1958 [i.e. Jan. 1959]. viii,150pp., diagrs., bibliogs. 50*s*. or $7.50.

An introduction to the 3-body and *n*-body problems, supplemented by a chapter on the 2-body problem for extended deformable bodies. *B*

KOPAL, Z. 459
Close binary systems. C & H, 1959. xvi,558pp., tables, diagrs., bibliog. 5 *gns*. *International astrophysics series, ed. by M. A. Ellison and A. C. B. Lovell; vol. 5.*

Comprehensive account of the methods of obtaining information from observations of close binary systems. *C*

SCHMIDT, O. 460
A theory of the origin of the earth: four lectures; tr. from the Russian by G. H. Hanna. [3rd ed.]. London, Lawrence & Wishart, 1959. 139pp., tables, diagrs., bibliog. 4*s*. 6*d*.

Translation of four lectures on planetary formation from cosmic dust. *B*

STUMPFF, K. 461
Planet earth; tr. [from the German] by P. Wayne. Ann Arbor, Michigan University P.; [London, Mayflower], 1959. 192pp., illus., diagrs. $5 or 40*s*. *Ann Arbor science library.*

First published as *Die Erde als Planet*, Springer-Verlag, 1955. Survey of earth's main features as an astronomical body, its magnetic properties, internal structure, atmosphere, and ionosphere. *A*

526 Geodesy

CLARK, D. 462
Plane and geodetic surveying for engineers; vol. 1, plane surveying; rev. and enl. by J. Clendinning. 5th ed. Constable, 1958 [i.e. Feb. 1959]. xviii,674pp., illus., tables, diagrs., bibliogs. 32*s*. 6*d*.

Detailed description of field methods and associated instruments. *B*

53 PHYSICS

AMERICAN VACUUM SOCIETY. Committee on standards 463
Glossary of terms used in vacuum technology. N.Y., London, [etc.], Pergamon P., 1958. [8],64pp. $2 or 10*s*.

Final revision of previous drafts, standardizing the nomenclature. *D*

AUDUBERT, R. *and* MENDE, S. DE 464
The principles of electrophoresis; tr. [from the French] by A. J. Pomerans. Hutchinson, 1959. viii,142pp., plates, tables, diagrs. 25*s*.

Introduction to principles, techniques, and applications. Selected references up to 1954. *B*

BERS, L. 465
Mathematical aspects of subsonic and transonic gas dynamics. N.Y., Wiley, 1958; London, C & H, 1959. 164pp., diagrs. $7.75 or 62*s*. *C*

CHAMPION, F. C. *and* DAVY, N. 466
Properties of matter. 3rd ed. London, Glasgow, Blackie, 1959. xvi,334pp., diagrs. 40*s*.

Previous ed. 1952. For advanced students of physics. *C*

MCCUSKEY, S. W. 467
Introduction to advanced dynamics. Reading (Mass.), Addison-Wesley, 1959. viii,263pp. $8.50.

Assumes some knowledge of vector analysis, but no matrix algebra. *C*

PAI, S-I. 468
Introduction to the theory of compressible flow. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. xiv,385pp., diagrs., bibliog. $9.75 or 73*s*.

Covers classical thermodynamics and gasdynamics with special chapters on interaction phenomena in mixtures, chemical reactions, and magnetic gasdynamics. *C*

RYDER, G. H. 469
Theory of machines through worked examples. 3rd ed. enl. Cleaver-Hume, 1959. viii,280pp., tables, diagrs. 21*s*.

Second ed. 1956. Concise volume covering the subject at Higher National Certificate and professional institution level. *C*

TRILLAT, J-J. 470
Exploring the structure of matter, with a preface by M. de Broglie and L. de Broglie; tr. [from the French] by F. W. Kent. A & U, 1959. 216pp., plates, tables, diagrs., bibliog. 30*s*.

Translated from *Découverte de la matière*, Paris, 1956. Authoritative account of several methods for study of structure of materials, their application, value, and limitations. *B*

WAIT, J. R. 471
Electromagnetic radiation from cylindrical structures. London, [etc.], Los Angeles, Pergamon P., 1959. x,200pp., diagrs., bibliog. 50*s*. or $7.50.

Mathematical theory of slot- and flush-mounted antennae on simple bodies, presented analytically and graphically. *B*

539.1 Nuclear physics

ELTON, L. R. B. 472
Introductory nuclear theory. Pitman, 1959. xii,286pp., tables, diagrs., bibliog. 40*s*.

The approach is phenomenological, and the mathematical and quantum mechanical treatment is given in adequate detail. *B–C*

ENDT, P. M. *and* DEMEUR, M., *eds* 473
Nuclear reactions; vol. 1. Amsterdam, North-Holland, 1958; N.Y., Interscience, 1959. 500pp., illus. 43 *fl*. or $12.50. *Series in physics.*

Deals with reactions in which the initial state has two components, the target nucleus and the bombarding particle or radiation. *C*

HAMILTON, J. 474
The theory of elementary particles. Oxford, Clarendon P., 1959. xii,483pp., tables, diagrs. 75*s*. *International series of monographs on physics; gen. eds N. F. Mott and E. C. Bullard.*

Basic mathematical methods used in investigating elementary particles. Physical examples are used to illustrate each method. *C*

HOISINGTON, D. B. 475
Nucleonics fundamentals. N.Y., [etc.], London, McG-H, 1959. xii,410pp., illus., tables, diagrs., bibliog. $9.50 or 74*s*. *McGraw-Hill series in nuclear engineering, ed. by W. H. Zinn, J. D. Luntz.* *A–B*

476
PROCEEDINGS of the Institute of Petroleum Hydrocarbon Research Group Conference on molecular spectroscopy held in London 27–28 February 1958. London, [etc.], Los Angeles, Pergamon P., 1959. x,352pp., tables, diagrs. 70*s*. or $12.50.

Twenty-two well-documented review papers representing spectroscopic methods and techniques of current interest. *B*

477
RADIATION protection: recommendations of the International Commission on Radiological Protection (adopted September 9, 1958). London, N.Y., [etc.], Pergamon P. for the International Commission on Radiological Protection, 1959. vi,20pp. 3*s*. 6*d*. or 50*c*.

Deals primarily with maximum permissible doses to those occupationally exposed to radiation hazard, also population and the rapidly increasing industrial problems. *D*

54 CHEMISTRY

ALLEN, P. W., *ed.* 478
Techniques of polymer characterization. London, Butterworths; N.Y., Academic P., 1959. xiv,256pp., tables, diagrs., bibliog. 50*s*. or $9.50.

Contributions from eight recognized workers deal with theoretical and practical aspects of molecular weight determination of high polymers. *C*

COLLOQUE DE BIOLOGIE, 1er, Saclay, 1958. 479
The method of isotopic tracers applied to the study of active ion transport, [ed. by J. Coursaget]. London, Paris, [etc.], Pergamon P., [1959]. x,196pp., plate, tables, diagrs., bibliog. 60*s*. or 3000 *frs*.

Critical analysis of present methods of elucidating transport of material across biological membranes. *C*

HUTCHINSON, E. 480
Chemistry: the elements and their reactions; ill. by the author. Philadelphia, London, Saunders, 1959. 746pp., illus., tables, diagrs. $7.50 or 52*s*. 6*d*.

Tables on end papers. A readable textbook for the first- and second-year students' course at American universities, which should be of interest to British lecturers for comparison with British courses, and to students outside the U.S.A. *B*

481
MODERN aspects of electrochemistry; 2, ed. by J. O'M. Bockris. Butterworths, 1959. x,416pp., plates, tables, diagrs. 75*s*. *Modern aspects series of chemistry, ed. by F. C. Tompkins.*

Five review articles on theory of electrolyte solutions, physical chemistry of ion exchange resins, molten electrolytes, anodic behaviour of metals, and electro-chemistry of electrolyte-semiconductor interface. *B–C*

SALMON, J. E. *and* HALE, D. K. 482
Ion exchange: a laboratory manual. London, Butterworths; N.Y., Academic P., 1959. viii,136pp., tables, diagrs. 25*s*. or $5.

For students entering university. Theory and detailed practical experiments. *B*

SOCIETY OF CHEMICAL INDUSTRY 483
The physical properties of polymers: comprising papers read at the Silver Jubilee Symposium organized by the Plastics and Polymers Group held in the University of London, April 15–17, 1958. The Society, 1959. iv,294pp., illus., tables, diagrs., bibliog. 30*s*. *Monographs no. 5.*

Papers on basic theoretical problems of structure and properties, and technological subjects such as testing methods. *C*

57 BIOLOGY

BAILEY, N. T. J. 484
Statistical methods in biology. EUP, 1959. x,200pp., tables, diagrs., bibliog. 25*s*. *Biological science texts; gen. ed. W. S. Bullough.*

Primer of statistical techniques for those with limited mathematical knowledge. Emphasizes conditions when specific methods should be used, and contains selections from the principal statistical tables. *B*

BERGIER, J. 485
The secrets of living matter; tr. from the French by L. R. Celestin, with a postscript by R. P. Jérôme Beckært. Barrie & Rockliff, 1959. x,140pp., plates. 13*s*. 6*d*.

From *Mystères de la vie*, 1957. A summary of the great advances made recently in the understanding of living matter. *A*

HARDY, *Sir* A. 486
The open sea: its natural history; part 2, fish and fisheries, with chapters on whales, turtles, and animals of the sea floor; with water colour and line drawings by the author, sixty-eight photographs in black and white by D. Wilson and others. Collins, 1959. xiv,322pp., illus., plates, tables, diagrs. 30*s*. *New naturalist series, ed. by J. Fisher and others, no. 37.* *A–C*

SAUNDERS, J. T. *and* MANTON, S. M. 487
A manual of practical vertebrate morphology. 3rd ed. OUP, 1959. viii,272pp., diagrs., bibliog. 30*s*.

Previous ed. 1949. Directions for dissection are clear and enough theory is given to make the structure, and the functions, of the various systems of the animals comprehensible. *B*

ZEUNER, F. E. 488
The Pleistocene period: its climate, chronology, and faunal successions. [Rev. ed.]. Hutchinson, 1959. xx,21–448pp., plates, tables, diagrs., bibliog. 42*s*. *Scientific and technical publications.*

Previous ed., London, Ray Society, 1945. Additional chapter on further evidence for the detailed chronology of the period. *C*

577.1 Biochemistry

489
PROCEEDINGS of the International Symposium on enzyme chemistry, Tokyo and Kyoto 1957, organized by Science Council of Japan under the auspices of International Union of Biochemistry; comp. by Organizing Committee International Symposium on Enzyme Chemistry. London, [etc.], Los Angeles, Pergamon P., 1959. [14],542pp., illus., tables, diagrs. 120*s*. or $16.50. *I.U.B. symposium series; vol. 2.*

Four lectures and 113 papers on enzymatic group transfer, hydrogen, oxygen, or electron transfer, protein and enzyme formation, and enzymes and industry. Full references and brief accounts of discussion. *B–C*

58 BOTANY

AUDUS, L. J. 490
Plant growth substances. 2nd ed. Leonard Hill, 1959. xxii,554pp., illus., plates, tables, diagrs., bibliog. 65*s*. *Plant science monographs, ed. by N. Polunin.*

Previous ed. 1953. Revised to include material covering developments over six years, growth promoters and inhibitors, with glossary and analytical contents list. *A*

CLAPHAM, A. R. *and others* 491
Excursion flora of the British Isles, by A. R. Clapham, T. G. Tutin, and E. F. Warburg. Cambridge, CUP, 1959. xxxiv,579pp., diagrs. 22*s*. 6*d*.

Based on *Flora of the British Isles* (1952). Number of species described in detail and text figures have been restricted. All native, many naturalized, and some casual species are included in the keys. *B*

DUNCAN, U. K. 492
A guide to the study of lichens. Arbroath, Buncle, 1959. xxviii,164pp., plates, bibliog. 25*s*.

Systematic account of the lichens of the British Isles. *B*

ERICKSON, F. L. 493
Triggerplants. Perth (W.A.), Patersons, 1958. 280pp., illus., plates. 45*s*. *B*

FOSTER, A. S. *and* GIFFORD, E. M. 494
Comparative morphology of vascular plants; drawings by E. L. Gillespie. San Francisco (Calif.), Freeman; [London, B & S], 1959. xii,555pp., illus., diagrs., bibliog. $9 or 76*s*. 6*d*. *Series of books in biology, ed. by G. W. Beadle and others.*

Survey of the major groups from the Psilopsida to the Angiosperms, including their vegetative and sexual organs. *B*

GRANT, V. 495
Natural history of the phlox family; volume 1, systematic botany. The Hague, Nijhoff, 1959. 280pp., illus. 19 *fl. International scholars forum; vol. 1.* *C*

HARLEY, J. L. 496
The biology of mycorrhiza. Leonard Hill, 1959. xiv,234pp., plates, tables, diagrs., bibliog. 55*s*. *Plant science monographs, ed. by N. Polunin.*

Authoritative summary of recent work on symbiotic relationships between fungi and the roots of higher plants. *C*

HITCHCOCK, C. L. *and others, eds* 497
Vascular plants of the Pacific North-west; part 4, Ericaceae through Campanulaceae, ed. by C. L. Hitchcock, A. Cronquist, M. Ownbey, and J. W. Thompson; ill. by J. R. Janish. Seattle, University of Washington P., 1959. 516pp., illus. $12. *Washington University, publications in biology; vol. 17.* *B*

HUTCHINSON, J. 498
The families of flowering plants; vols 1 and 2. 2nd ed. Oxford, Clarendon P., 1959. Illus., tables, diagrs. 2v. 7 *gns.*

Vol. 1, Dicotyledons. xi,[5],510pp.; 1st ed. 1926. Vol. 2, Monocotyledons. viii,[2],511–792pp.; 1st ed. 1934. Subjects arranged according to a new system based on their probable phylogeny. Vol. 2 slightly and vol. 1 greatly enlarged since the first edition. *B–C*

POLUNIN, N. 499
Circumpolar Arctic flora. Oxford, Clarendon P., 1959. xxviii,514pp., illus. 6 *gns.*

A useful reference book for those interested in plant distribution. Botanical treatments and figures are designed to facilitate identification of the vascular plants of the region. *C*

59 ZOOLOGY

CARLISLE, D. B. *and* KNOWLES, *Sir* F. 500
Endocrine control in crustaceans. Cambridge, CUP, 1959. [8],120pp., illus., plates, diagrs., bibliog. 21*s*. *Cambridge monographs in experimental biology, ed. by M. Abercrombie and others, no. 10.* *C*

FREE, J. B. *and* BUTLER, C. G. 501
Bumblebees; with two appendices by I. H. H. Yarrow, ill. with forty-six photographs by C. G. Butler. Collins, 1959. xiv,208pp., illus., plates, bibliog. 25*s*. *New naturalist series, ed. by J. Fisher and others, no. 40.*

Behaviour and social life of the British bumblebees, their identification and distribution, with information on collection and maintenance of colonies in captivity. Detailed subject index. *A*

HALL, E. R. *and* KELSON, K. R. 502
Mammals of North America. N.Y., Ronald, 1959. Illus., maps. 2v. $35 or 262*s*. 6*d*. per set.

Vol. 1, xxx,546pp. Vol. 2, 547–1083pp. *C–D*

LINSSEN, E. F. 503
Beetles of the British Isles. F. Warne, 1959. Illus., plates, tables, bibliogs. 2v. 30*s*. each. *Wayside and woodland series.*

Vol. 1, first series, comprising the superfamilies Caraboidea, Palpicornia, Staphylinoidea, and Diversicornia. 304pp. Vol. 2, second series, comprising the superfamilies Clavicornia, Heteromera, Lamellicornia, Phytophaga, and Rhynchophora and including the Strepsiptera. 295pp. *A*

MACLEOD, R. D. 504
Key to the names of British butterflies and moths. Pitman, 1959. viii,86pp. 15*s*.

Gives the meaning of the scientific and some common names with an instructive introduction. *D*

MEINERTZHAGEN, R. 505
Pirates and predators: the piratical and predatory habits of birds. Edinburgh, London, O & B, 1959. x,230pp., plates, tables. 70*s*. *B*

PESSON, P. 506
The world of insects; tr. [from the French] by R. B. Freeman. Harrap, 1959. 204pp., illus., diagrs., bibliog. 63*s*. *Living nature series.*

Originally published as *Le monde des insectes*, Paris, 1958. Based on the latest scientific research. *A*

ROMER, A. S. 507
The vertebrate story. 4th ed. Chicago, Chicago University P.; London, CUP, 1959. viii,437pp., illus., tables, diagrs., bibliog. $7 or 52*s*. 6*d*.

Previous ed. published as *Man and the vertebrates*, 1941. *A–C*

TAYLOR, J. A. 508
Regional and applied anatomy of the domestic animals; part two, thoracic limb. Edinburgh, London, O & B, 1959. viii,206pp., illus., diagrs. 27*s*. 6*d*.

Second part of a series likely to become a standard work. Deals with thoracic limb of dog and horse with special reference to clinical conditions affecting structure. *B*

VAURIE, C. 509
The birds of the palearctic fauna: a systematic reference; vol. 1, order Passeriformes. Witherby, 1959. xii,762pp., bibliog. 5 *gns*. *C–D*

6 APPLIED SCIENCES

62 ENGINEERING

620.1 Strength of materials

FINNIE, I. *and* HELLER, W. 510
Creep of engineering materials. N.Y., [etc.], London, McG-H, 1959. 327pp., illus. $11.50 or 89*s*. *A*

HINSLEY, J. F. 511
Non-destructive testing, with a foreword by E. Gregory. Macdonald & Evans, 1959. xxxiv,495pp., illus., tables, diagrs., bibliog. 75*s*.

For new entrants to the subject. *B*

VAN VLACK, L. H. 512
Elements of materials science: an introductory text for engineering students. Reading (Mass.), London, Addison-Wesley, 1959. xvi,528pp., illus., tables, diagrs. $6.50 or 49*s*. (international ed.). *Addison-Wesley series in metallurgy and materials, ed. by M. Cohen.*

Deals with science of materials at undergraduate level; provides a theoretical understanding of structure and properties, and covers the behaviour of materials in use. *B*

WILSON, W. K. 513
Vibration engineering: a practical treatise on the balancing of engines, mechanical vibration, and vibration isolation. Griffin, 1959. xii,292pp., plates, tables, diagrs,. bibliog. 90*s*.

Practical, up-to-date text by an established writer in this field. *C*

621 Mechanical engineering

DEHNEL, P. D. 514
Fundamentals of boiler house technique. Hutchinson, 1959. x,164pp., plates, tables, diagrs., bibliog. 25*s*.

Covers boilers, fuel, water treatment, combustion, testing, and atmospheric pollution. *B*

GASCOYNE, J. 515
Analysis of pipe structures for flexibility. Pitman, 1959. xiv,181pp., plates, tables, diagrs. 45*s*. *B*

621.3 Electrical engineering

AMOS, S. W. 516
Principles of transistor circuits: introduction to the design of amplifiers, receivers, and other circuits. London, Iliffe; N.Y., Rider, 1959. viii,167pp., diagrs. 21*s*. or $3.60.

Treatise on theory and circuit principles intended for the designer who has no previous knowledge of the subject. *B*

CARROLL, J. M. 517
Modern transistor circuits. N.Y., [etc.], London, McG-H, 1959. xii,268pp., illus. $8.50 or 66*s*. *C*

DALY, J. *and* GREENFIELD, R. A. 518
Basic electronics. Heywood, 1959. x,226pp., tables, diagrs., bibliog. 45*s*. *Physical processes in the chemical industry; vol. IV; gen. eds J. C. Robb and W. F. Coxon.*

Introduction to the principles of electronic circuitry without detailed design data. *A*

GAVIN, M. R. *and* HOULDIN, J. E. 519
Principles of electronics. EUP, 1959. xii,348pp., tables, diagrs., bibliog. 30*s*. *Physical science texts; gen. ed. Sir G. Sutton.* *B*

HIRST, A. W. 520
Electricity and magnetism: for engineering students. 3rd ed. London, Glasgow, Blackie, 1959. xvi,438pp., diagrs. 40*s*.

First ed. 1936. Has been rewritten, using the m.k.s. system of units. *B*

HUGHES, L. E. C., *gen. ed.* 521
Electronic engineer's reference book, with a foreword by P. Dunsheath. 2nd ed. Heywood, 1959. 1588pp., tables, diagrs. 84*s*.

First ed. 1958. About 350 pages on digital computers, simulators, and electronic telephone exchanges have been added. *D*

MILLER, W. E. 522
Radio circuits: a step-by-step survey; rev. by E. A. W. Spreadbury. 4th ed. Iliffe, 1959. x,172pp., diagrs. 15*s*.

Previous ed. 1951. First published in 1941. *A–B*

NEWSTEAD, G. 523
General circuit theory. London, Methuen; N.Y., Wiley, 1959. viii,144pp., table, diagrs., bibliog. 15*s*. *Monographs on physical subjects, ed. by B. L. Worsnop.*

For use in analysing complex networks primarily in communication engineering. *C*

OLDFIELD, R. L. 524
The practical dictionary of electricity and electronics; includes handbook. Chicago, American Technical Society, 1958; London, Technical P., 1959. viii, 216pp., illus., tables, diagrs. $5.95 or 52*s*.

American terminology is used throughout, including slang expressions. *D*

RHODES, D. R. 525
Introduction to monopulse. N.Y., [etc.], London, McG-H, 1959. viii,119pp., illus. $6 or 46*s*. 6*d*. *C*

SLUCKIN, W. *and* GREENER, J. R. 526
Principles of alternating currents. 2nd ed. Cleaver-Hume, 1959. 338pp., illus., tables, diagrs. 15*s*. *Electrical series, ed. by H. Cotton, no. 3.*

For students reading for National and City and Guilds Technicians' certificates, and presupposes only very elementary knowledge of the subject. *B*

623 Military and Naval engineering

FRANK, R. G. *and* ZIMMERMANN, W. F. 527
Materials for rockets and missiles. N.Y., [London], Macmillan (N.Y.), 1959. xx,124pp., illus., tables, diagrs., bibliog. $4.50 or 31*s*. 6*d*.

Compilation of engineering data on the established lightweight and high-temperature materials. Should also facilitate assessment of new materials. *B–C*

624 Civil engineering

HAMMOND, R. 528
Tunnel engineering. Heywood, 1959. xiv,332pp., illus., tables, diagrs., bibliog. 55*s*. *C*

HARRIS, C. O. 529
Introduction to stress analysis. N.Y., [London], Macmillan (N.Y.), 1959. xiv, 330pp., tables, diagrs. $7.50 or 52*s.* 6*d.*

For those working for elementary examinations. *B*

MAXWELL-COOK, J. C. 530
Civil engineering contracts organization. Cleaver-Hume, 1959. [8],217pp., illus., plates, tables, diagrs., bibliog. 22*s.* 6*d.*

Deals with the functions of each member of a team, procedure for tendering, specifications, quantities, and the organization of site work. *B*

REYNOLDS, H. R. *and* PROTOPAPADAKIS, F. 531
Practical problems in soil mechanics. 3rd ed. Crosby Lockwood, 1959. xii, 224pp., illus., tables, diagrs., bibliog. 21*s.*

Previous ed. 1956. Solutions to problems which involve mathematical calculations. Additional matter on sand drains, vibration, piled foundations, and nuclear radiation for determining soil moisture and density. *B*

629 Transport engineering

LANCASTER, O. E., *ed.* 532
Jet propulsion engines. Princeton (N.J.), Princeton University P., 1959. 799pp., illus., diagrs. $20. *High-speed aerodynamics and jet propulsion; vol. 12.* *C*

629.13 Aeronautical engineering

ETKIN, B. 533
Dynamics of flight: stability and control. N.Y., Wiley; London, C & H, 1959. xiv,519pp., illus., tables, diagrs., bibliog. $15 or 120*s.* *Wiley books in space technology.* *C*

PAYNE, P. R. 534
Helicopter dynamics and aerodynamics. Pitman, 1959. xiii,442pp., illus., plates, tables, diagrs., bibliog. 84*s.*

Advanced treatise on the theory of flight by rotating-wing aircraft. *C*

WAKEFIELD, G. G., *ed.* 535
Aircraft electrical engineering. C & H, 1959. xiv,349pp., illus., tables, diagrs., bibliog. 50*s.* *Royal Aeronautical Society, textbooks no. 4.* *C*

63 AGRICULTURE

CULPIN, C. 536
Farm mechanization and management. Crosby Lockwood, 1959. xiv,226pp., plates, tables, diagrs., bibliog. 21*s.*

Well documented, includes tables of relative costs. *B*

HILEY, W. E. 537
Conifers: South African methods of cultivation. Faber, 1959. 123pp., plates, tables, diagrs., bibliog. 21*s.* *C*

THIMANN, K. V., *ed.* 538
Physiology of forest trees: a symposium held at the Harvard forest under the auspices of the Maria Moors Cabot foundation, ed. by K. V. Thimann with the assistance of W. B. Critchfield and M. H. Zimmerman. N.Y., Ronald, 1958. 678pp., illus., bibliog. $12.

Papers cover water relations and sap movement, photosynthesis, general biochemistry, mineral nutrition, phloem transport, root growth, reproduction, etc. *B–C*

636 Livestock

AINSWORTH, G. C. *and* AUSTWICK, P. K. C. 539
Fungal diseases of animals. Farnham Royal, Commonwealth Agricultural Bureaux, 1959. [12],148pp., plates, tables, bibliog. 20*s*. *Commonwealth Bureau of Animal Health, reviews no. 6.*

First text in English on a rapidly growing subject. *B*

MILLER, W. C. *and* ROBERTSON, E. D. S. 540
Practical animal husbandry. 7th ed. rev. and enl. Edinburgh, London, O & B., 1959. xii,650pp., illus., plates, tables, diagrs. 31*s*. 6*d*.

Previous ed. 1952. Standard book. *B*

VOISIN, A. 541
Grass productivity; tr. [from the French] by C. T. M. Herriot. Crosby Lockwood, 1959. xiv,354pp., plates, tables, diagrs., bibliog. 50*s*. *Agricultural and horticultural series.*

Study of organized grazing based on a system practised in France, and reviewed in the light of current research. *B*

66 CHEMICAL TECHNOLOGY

BETTERIDGE, W. 542
The nimonic alloys. Edward Arnold, 1959. xii,332pp., illus., tables, diagrs., bibliog. 80*s*.

A concise reference work on the characteristics, properties, methods of fabrication, and fields of application for high-temperature service. *C*

INSTITUTE OF PETROLEUM 543
Standard methods for testing petroleum and its products (excluding engine test methods for rating fuels). 18th ed. The Institute, [1959]. xxiii,836,xxxiipp., illus., plates, tables, diagrs. 40*s*.

Well indexed. Four methods have been added. *D*

INSTITUTION OF METALLURGISTS 544
The structure of metals: a modern conception; lectures delivered at the Institution of Metallurgists refresher course, 1958. London, Iliffe; N.Y., Interscience, for the Institution, 1959. vi,117pp., illus., tables, diagrs., bibliogs. 25*s*.

Four lectures covering a wide field. A considerable grounding in metal physics is essential for the understanding of the first two papers. *C*

PATTISON, E. S., *ed.* 545
Industrial fatty acids and their applications. N.Y., Reinhold; London, C & H, 1959. [6],230pp., illus., tables, diagrs., bibliog. $7 or 56*s*.

Includes chemistry and production, protective coatings, cosmetics, soaps, and plasticizers. *B*

RAYNOR, G. V. 546
The physical metallurgy of magnesium and its alloys. London, [etc.], Los Angeles, Pergamon P., 1959. x,532pp., plates, tables, diagrs. 75*s*. or $12.50. *International series of monographs on metal physics and physical metallurgy, ed. by G. V. Raynor; vol. 5.*

Analyses what is known of the constitution and structure of useful alloy systems based on magnesium. *C*

SMITH, R. L. 547
The sequestration of metals: theoretical considerations and practical applications. C & H, 1959. viii,256pp., tables, diagrs., bibliog. 42*s*.

Well-documented reference book for non-specialists of graduate standing. Reviews practical applications of sequestration agents. *B*

67/68 MANUFACTURES

HOWELL, H. G. *and others* 548
Friction in textiles, by H. G. Howell, K. W. Mieszkis, D. Tabor. London, Butterworths in association with the Textile Institute; N.Y., Textile Book Publishers, 1959. xii,263pp., plates, tables, diagrs., bibliog. 42*s*.

Well-documented monograph, dealing with theory, effects in textile processing, and test methods. *B–C*

NEUMANN, J. A. *and* BOCKHOFF, F. J. 549
Welding of plastics. N.Y., Reinhold; London, C & H, 1959. viii,280pp., illus., tables, diagrs., bibliog. $7.25 or 58*s*.

An American review, including data on the properties of the plastics concerned. For chemical engineers concerned with the fabrication of chemical plant, technologists in the plastics industry, and specialist workers in this field. *C*

PEARSON, R. G. *and others* 550
Timber engineering design handbook. Australia, Commonwealth Scientific and Industrial Research Organization; Cambridge, CUP, 1958. 248pp., illus., tables, diagrs. 30*s*.

Results of thirty years' intensive research and experience in timber technology. *C*

ZADE, H. P. 551
Heatsealing and high-frequency welding of plastics, with a foreword by H. Leduc. Temple P. in association with *Plastics*, 1959. xii,211pp., illus., tables, diagrs., bibliog. 35*s*.

Deals with theoretical and practical aspects, applications, and details of materials. *C*

681 Precision mechanisms

HOLLINGDALE, S. H. 552
High-speed computing: methods and applications. EUP, [1959]. xii,244pp., illus., tables, diagrs., bibliog. 25*s*. *Applied physics guides, ed. by Sir G. Sutton.* *A–B*

KING, G. J. 553
The practical hi-fi handbook. Odhams, 1959. 224pp., illus., tables, diagrs. 25*s*.

Comprehensive handbook principally for servicemen but also intelligible to interested amateurs. *A–B*

554
PROCEEDINGS [of the] Canadian conference for computing and data processing; June 9, 10, 1958, held at the University of Toronto. Toronto, University of Toronto P.; [London, OUP, 1959]. xii,383pp., tables, diagrs. $5 or 40*s*.

Thirty-eight papers describing the application of computers in fields such as life insurance, government service, aircraft performance, surveying. *A*

69 BUILDING

HOLLOWAY, D. M. 555
Gas fitting (intermediate). EUP, 1959. xiv,417pp., illus., tables, diagrs. 21*s*.
A practical textbook for apprentice craftsmen. *B*

HUNT, W. D. 556
Contemporary curtain wall: its design, fabrication, and erection. N.Y., Dodge, 1958. 454pp., illus. $12.75. *B*

KEELING, F. 557
Constructional carpentry. Cleaver-Hume, 1959. 274pp., illus., diagrs. 25*s*. *B*

7 FINE ARTS

72 ARCHITECTURE

GREAT BRITAIN. Department of Scientific and Industrial Research. 558
Building Research Station
Modern multi-storey factories: a discussion of their design, by W. A. Allen. HMSO, 1959. x,17pp., plates. 2*s*. 6*d*. *Factory building studies no. 1*. *B*

MCCALLUM, I. R. M. 559
Architecture in U.S.A. N.Y., Reinhold; Toronto, Burns and MacEachern; London, Architectural P., 1959. 216pp., illus. $13.50 or 3 *gns*. *A*

PRICE, B. 560
Technical colleges and colleges of further education. Batsford, 1959. 160pp., plates, tables, diagrs. 75*s*.
For architects or authorities concerned with new college planning. Brief historical background followed by requirements and detailed analysis of twelve schemes. *C*

YORKE, F. R. S. *and* GIBBERD, F. 561
Modern flats. Architectural P., 1958. 211pp., illus. 63*s*.
Illustrations of recent flat buildings throughout the world. *A–B*

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK LIST

A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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Maps on end papers. Scholarly and authoritative account of the modern iron and steel industry, showing its changing development and the rise of modern integrated works. *A–C*

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5 NATURAL SCIENCES

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Fundamentals of mathematics. Englewood Cliffs (N.J.), [London], Prentice-Hall, 1959. xii,289pp., tables, diagrs. $5 or 45*s*. *Mathematics series, ed. by A. A. Bennett.*

Apart from one chapter on geometry, this is an elementary text on algebra as far as the solution of quadratic equations, with emphasis on extension of the integer field to rationals and irrationals, and on the axiomatic structure of elementary algebra. *B*

KEMENY, J. G. *and others* 567

Finite mathematical structures, by J. G. Kemeny, H. Mirkil, J. L. Snell, G. L. Thompson. Englewood Cliffs (N.J.), [London], Prentice-Hall, 1959. xii,487pp., tables, diagrs., bibliog. $7.95 or 72*s*.

Elementary text on symbolic logic, set theory, linear algebra, convex sets, and probability (including Markov chains and continuous distributions). *B*

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Differential geometry. Toronto, University of Toronto P.; London, OUP, 1959. xiv,352pp., tables, diagrs., bibliog. $6 or 48*s*. *Mathematical expositions no 11.*

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Elementary practical hydraulics of flow in pipes: a text and reference book for engineers and draughtsmen. OUP, 1959. viii,213pp., tables, diagrs. 21*s.*

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MILL, C. C., *ed.* 573
Rheology of disperse systems: proceedings of a conference organized by the British Society of Rheology and held at the University College of Swansea in September 1957. London, [etc.], Los Angeles, Pergamon P., 1959. viii,223pp., plates, tables, diagrs. 60*s.* or $9.50.

For research workers, particularly in paint, printing ink, cement, and other industries where a study of rheology is important. *C*

574
PROGRESS in cryogenics; vol. 1, ed. by K. Mendelssohn. Heywood, 1959. viii, 259pp., plates, tables, diagrs., bibliog. 63*s.*

Provides critical reviews of selected topics in cryogenics. *C*

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Fluid dynamics. Edinburgh, London, O & B. N.Y., Interscience, 1959. x,226pp., tables, diagrs. 10*s.* 6*d.* *University mathematical texts; gen. eds A. C. Aitken and D. E. Rutherford.*

Concise review for honours mathematics students; covers potential flow theory, complex variable hodograph and numerical methods for incompressible flow; also compressible flow, viscosity, and boundary layer. *C*

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7TH SYMPOSIUM (International) on combustion, at London and Oxford, 28 August–3 September 1958. London, Butterworths for the Combustion Institute; N.Y., Academic P., 1959. xlvi,959pp., illus., tables, diagrs. 224*s.* or $28.

Reference book for academic and industrial research workers in this field, including those engaged on research in aviation, missiles, and normal and special fuels. *C*

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54 CHEMISTRY

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Chemical textbook for advanced sixth-formers and undergraduates, which deals with the fundamentals of structure and reaction, and the chemistry of the common elements. *B*

584
INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY. Section on organic chemistry
Theoretical organic chemistry: papers presented to the Kekulé symposium organized by the Chemical Society, London, September 1958. London, Butterworths; [N.Y., Academic P.], 1959. xvii,298pp., tables, diagrs., bibliogs. 50*s*. or $9.50.

Fourteen papers. Subjects include bond theory, steric and configurational factors, conformation, and the different reaction types observed in organic chemistry. *B–C*

585
PROCEEDINGS of the international symposium on macromolecular chemistry, held in Prague, September 1957, under the auspices of the International Union of Pure and Applied Chemistry. London, [etc.], Los Angeles, Pergamon P.; Prague, Czechoslovak Academy of Sciences, Czechoslovak Chemical Society, [1959]. [6],306pp., plates, tables, diagrs. 35*s*. or $6.

Supplement no. 2 to *Tetrahedron*. Twenty papers, dealing with biological polymers, physics, and physical chemistry of macromolecules and polyreactions. Published in the original languages. *C*

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Nitration of hydrocarbons and other organic compounds; tr. from the Russian by C. Matthews. London, [etc.], Los Angeles, Pergamon P., 1959. vi,329pp., tables, diagrs., bibliog. 90*s*. or $12.50.

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Apparatus and methods of oceanography: part 1, chemical. A & U, 1959. 342pp., plates, tables, diagrs., bibliog. 40*s*.

Encyclopaedic account of chemical methods used for determination of salt, nutrients, dissolved gases in sea and for investigating marine sediments. *B*

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The earth: its origin, history, and physical constitution. 4th ed. Cambridge, CUP, 1959. xvi,420pp., plates, tables, diagrs., bibliog. 75*s*.

Previous ed. 1952. *C*

57 BIOLOGY

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Progress in biophysics and biophysical chemistry; vol. 9. London, [etc.], Los Angeles, Pergamon P., 1959. viii,388pp., plates, tables, diagrs., bibliogs. 5 *gns* or $17.50. *Progress series.*

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Principles of microbiology. 2nd ed. Philadelphia, London, Saunders, 1959. xxiv,563pp., illus., tables, diagrs., bibliog. $5.75 or 47*s*.

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An introduction to bacterial physiology; drawings by E. L. Gillespie. 2nd ed. San Francisco, Freeman; [London, B & S], 1959. xii,443pp., illus., tables, diagrs., bibliog. $7.50 or 64*s*. *A series of biology texts; eds G. W. Beadle, R. Emerson, and D. M. Whitaker.*

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59 ZOOLOGY

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597
CONFERENCE on physiology of insect development, MacDonald College, 1956, ed. by F. L. Campbell. Chicago, University of Chicago P.; [London, CUP], 1959. xiv,167pp., illus., tables, diagrs. $4 or 30*s*. *Developmental Biology Conference series, 1956.* *C*

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Dangerous marine animals. Cambridge (Md), Cornell Maritime P., 1959. xiii, 146pp., illus. $4.

Marine animals that bite, sting, and are not edible. *A–B*

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IMMS, A. D. 600
Outlines of entomology. 5th ed. rev. by O. W. Richards and R. G. Davies. Methuen, 1959. 224pp., illus., diagrs., bibliog. 21*s*.

Previous ed. 1949. *B*

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Frontiers in cytology. New Haven (Conn.), Yale University P., 1958; [London, OUP, 1959]. xii,529pp., plates, tables, diagrs. $9.75 or 78*s*.

Seventeen articles by American workers, reviewing current work in animal cytology and attempting to relate it to general biological phenomena. *C*

RUSSELL, W. M. S. *and* BURCH, R. L. 602
The principles of humane experimental technique. Methuen, 1959. xiv,238pp., tables, diagrs., bibliog. 30*s*.

Pioneering work to establish first principles whereby experiments on living animals can be made more humane and more efficient by replacement, reduction, and refinement in experimental procedures. *B–C*

603
SYMPOSIUM on regeneration in vertebrates, Brown University, 1956, ed. by C. S. Thornton. Chicago, University of Chicago P., 1959. xii,108pp., illus., tables. $3.25. *Developmental Biology Conference series, 1956.* *C*

VAN TYNE, J. *and* BERGER, A. J. 604
Fundamentals of ornithology. N.Y., Wiley; London, C & H, 1959. xii,624pp., illus., tables, diagrs., bibliogs. $11.75 or 94*s*.

Up-to-date textbook on bird biology with branches covered adequately, by American ornithologists of international repute. Large section on classification. *B*

6 APPLIED SCIENCES

62 ENGINEERING

621 Mechanical engineering

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Progress in vacuum science and technology. London, [etc.], Los Angeles, Pergamon P., 1959. [4],160pp., illus., tables, diagrs., bibliog. 70*s*. or $10.

Collection of papers on aspects of vacuum technique, of interest to practising engineers. *B*

621.3 Electrical engineering

BRITISH ELECTRICAL AND ALLIED MANUFACTURERS' ASSOCIATION 606
Leading the world. [The Association, 1959]. 64pp., illus., diagrs. *gr*.

Review of the British electrical industry and its participation in the Brussels Exhibition, 1958. *A*

CHAPPEL, G. A. 607
Radio stations: installation, design, and practice. London, [etc.], Los Angeles, Pergamon P., [1959]. viii,248pp., plates, tables, diagrs. 50*s*. or $7.50.

Essentially a practical work covering all aspects of transmitting and receiving stations, from selection of site and erection of buildings to operation and maintenance. *B*

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Solid state magnetic and dielectric devices. N.Y., Wiley; London, C & H, 1959. xxii,542pp., tables, diagrs., bibliog. $16 or 108*s*.

Inclusive treatment of theory and application of the ferrite and titanate materials used for solid state devices and components. Transistors are excluded. *C*

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The cathode-ray tube and its applications. 3rd ed. rev. and enl. C & H, 1959. xii,434pp., illus., tables, diagrs. 50*s*.

Revised and enlarged edition of *The low voltage cathode ray tube* forming a complete handbook on the whole subject. Extensive bibliography provided. *B*

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Fluctuation phenomena in semi-conductors. London, Butterworths; N.Y., Academic P., 1959. viii,168pp., tables, diagrs. 35*s*. *Semi-conductor monographs; gen. ed. C. A. Hogarth.*

Survey of work carried out on noise phenomena in semi-conductor materials and devices. For research workers and students of advanced physics. *C*

624 Civil engineering

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Advanced structural analysis. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. xiv,368pp., tables, diagrs. $7.50 or 56*s*. 6*d*.

Advanced textbook for students and practising designers of all kinds of structures. *C*

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Previous ed. 1950. New material on surveying; railway, road, and airport engineering; hydraulics; stresses; concrete; foundations; sewerage and water supply. *B*

63 AGRICULTURE

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Tables on end papers. Presents the most important experimental methods used in soil chemical analysis. *B*

JOHNSON, L. F. *and others* 615
Methods for studying soil microflora—plant disease relationships, by L. F. Johnson, E. A. Curl, J. H. Bond, and H. A. Fribourg. Minneapolis (Minn.), Burgess, 1959. iii,178pp., tables, diagrs., bibliog. $3.50. *A contribution of Southern Regional Project, S-26.*

Manual compiling experimental and statistical methods used by soil microbiologists primarily in relation to antagonistic organisms and control of soil-borne plant diseases. *C*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

COPEMAN, G. 616
The role of the managing director. Business Publs in association with Batsford, 1959. xxx,31–284pp., bibliog. 42*s*.

Interesting material resulting from some 300 recent interviews with senior executives on the functions and purpose of management, with a well-prepared summary. *A*

66 CHEMICAL TECHNOLOGY

NATIONAL PHYSICAL LABORATORY 617
The physical chemistry of metallic solutions and intermetallic compounds: proceedings of a symposium held at the National Physical Laboratory on 4th, 5th, and 6th June 1958; vols 1 and 2. HMSO, 1959. Various pagination, tables, diagrs., bibliogs. 37*s*. 6*d*. *Symposium no. 9.* *C*

67/68 MANUFACTURES

GOLDING, B. 618
Polymers and resins: their chemistry and chemical engineering. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. viii,744pp., illus., tables, diagrs., bibliog. $15 or 112*s*. 6*d*.

Intended to cover all aspects of the plastics industry. Includes fundamentals of polymerization, of manufacture, processing, and applications of polymers and resins. *B*

681 Precision mechanisms

WRUBEL, M. H. 619
A primer of programming for digital computers. N.Y., [etc.], London, McG-H, 1959. xvi,230pp., tables, diagrs. $7.50 or 58*s*. *McGraw-Hill series in information processing and computers, ed. by J. P. Nash.* *B*

69 BUILDING

NATIONAL RESEARCH COUNCIL. Building Research Institute 620
Installation and maintenance of resilient smooth-surface flooring. Washington (D.C.), the Council, 1959. vi,146pp., illus. $5. *NAS–NRC publications 597.*

Fifteen papers describing bases for flooring, fastening methods for base and finish, and materials and maintenance. Floor coverings dealt with separately are asphalt, vinyl, rubber, cork, and linoleum. *B*

SHEPHERD, G., *ed.* 621
The insulation handbook. Lomax Erskine, [1959]. 130pp., tables, diagrs. 10*s.* (postage 6*d.*).

Practical guide for architects concerned with thermal, sound, and vibration insulation of buildings. *B–C*

7 FINE ARTS

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Introduction to technical drawing. Batsford, 1959. 96pp., diagrs. 10*s.* 6*d.*

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Expertly illustrated volume demonstrating methods of showing objects as they appear after manufacture and describing some of the problems experienced by those dealing with three-dimensional forms. *B*

71 TOWN and COUNTRY PLANNING

CROWE, S. 624
The landscape of power; with diagrams by M. Laurie. Architectural P., 1958. 115pp., illus, diagrs. 16*s.* *A–B*

Publishers

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A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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3 SOCIAL SCIENCES

33 ECONOMICS

331 Industrial relations

ROBERTS, B. C. 626
Unions in America: a British view. Princeton (N.J.), Princeton University, Industrial Relations Section, Department of Economics and Sociology, 1959. x,137pp. $2. *Research report series, no. 97.*

Useful comparison of the place of the trade unions in the USA and in this country. Shows how growth was slow in both countries, discusses the legal position of unions in USA, and considers the corruptions which have been shown up from time to time. *A*

36 WELFARE AND INSURANCE

627
HANDBOOK of industrial loss prevention; comp. by the Associated Factory Mutual Fire Insurance Companies. N.Y., [etc.], London, McG-H, 1959. 864pp. $20 or 155*s*.

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37 EDUCATION

BARCLAY, W. 628
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Critical review of primary education in underdeveloped countries. *B*

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Coming into their own: a study of the idiom of young children revealed in their verse writing. Heinemann, 1959. vii,192pp., bibliog. 21*s*.

Account of an experiment carried out in a junior school, including an anthology of the children's own writings. *A*

PARKYN, G. W. 632
Success and failure at the university; vol. 1, academic performance and the entrance standard. Wellington, N.Z., Council for Educational Research; London, OUP, 1959. xvii,254pp., tables, diagrs. 42*s*. *N.Z. Council for Educational Research series no. 38.*

Report of a large-scale investigation carried out at the University of New Zealand. *C*

VENABLES, P. F. R. 633
Sandwich courses for training technologists and technicians; with a contribution by R. Ratcliffe. Parrish, [1959]. 160pp., tables, diagrs., bibliog. 18*s*.

Critical examination of a new form of technical education; covers development of the course, present difficulties, and probable evolution. *A–B*

4 PHILOLOGY

TURKEVICH, J. *and* TURKEVICH, L. B. 634
Russian for the scientist. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. x,255pp., tables, diagrs. $5.95 or 45*s*.

Parallel grammar, exercises, and scientific texts arranged to introduce Russian quickly, easily, and thoroughly to the scientist. The authors are Professor of Chemistry and Lecturer in Russian at Princeton University. *B*

5 NATURAL SCIENCES

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A philosopher looks at science. Princeton (N.J.), [etc.], London, Van Nostrand, [1959]. xii,273pp., tables, diagrs., bibliog. 37*s*. 6*d*. *A–B*

REICHENBACH, H. 636
Modern philosophy of science: selected essays; tr. [from the German] and ed. by M. Reichenbach, foreword by R. Carnap. London, R & KP; N.Y., Humanities P., 1959. x,214pp., bibliog. 28*s*.

Essays, not otherwise readily available, on the logical empiricist approach to a number of topics in the philosophy of science. *C*

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51 MATHEMATICS

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A practical manual on the Monte Carlo method for random walk problems. London, [etc.], Los Angeles, Pergamon P., 1959. ix,153pp., diagrs. 40*s*. *International tracts in computer science and technology and their application, vol. 1, gen. eds N. Metropolis, E. Priory, S. Ulam, assisted by an International Honorary Editorial Advisory Board.*

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Elementary astronomy, by O. Struve, B. Lynds, and H. Pillans. N.Y., London, OUP, 1959. [6],396pp., illus., plate, tables, diagrs. $7 or 55*s*.

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Basic audio; vols 1, 2, and 3. N.Y., Rider, 1959. 114,122,114pp., tables, diagrs. $9.95.

Instruction manual covering all aspects of audio-frequency theory and practice from a study of the nature of sound to the elementary problems of stereophonics. *A–B*

DAVIES, R. *ed.* 646
Friction and wear: proceedings of the symposium on friction and wear. Detroit, 1957. Amsterdam, London, [etc.], Elsevier, 1959. [6],191pp., illus., tables, diagrs. 19 *fl*. or 36*s*. 6*d*.

Papers on research work done in America, with discussions and many illustrations. *C*

PHYSICAL SOCIETY 647
Reports on progress in physics; vol. xxii (1959), ed. by A. C. Stickland. The Society, 1959. 634pp., illus., tables, diagrs., bibliogs. 63*s*. (21*s*. to members.)

Includes fourteen articles, three by Russian physicists. *C*

RUTHERFORD, D. E. 648
Fluid dynamics. Edinburgh, London, O & B; N.Y., Interscience, 1959. ix, 226pp., plates, diagrs. 10*s*. 6*d*. or $1.95. *University mathematical texts; gen. eds A. C. Aitken and D. E. Rutherford.*

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539.1 Nuclear physics

DAS GUPTA, A. 649
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Popular introduction to the basic principles of atomic energy. *A*

SIMON, A. 650
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54 CHEMISTRY

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Originally published Moscow, Academy of Sciences of the U.S.S.R. Press, 1957. *B–C*

ONGLEY, P. A. 652
Tutorial questions in organic chemistry. ULP, [1959]. xii,276pp. 21*s*.

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SAMUEL, D. *and* STECKEL, F. *comp. and eds* 653
Bibliography of the stable isotopes of oxygen (O^{17} and O^{18}). London, [etc.], Los Angeles, Pergamon P., 1959. viii,224pp., 50*s*. or $7.50.

Bibliographical details of papers published up to the end of 1954 are arranged according to authors' names, with some ordered indication of contents set out in a subject index. Useful time-saver for those entering this field. *C–D*

WATERS, W. A. *ed.* 654
Vistas in free-radical chemistry; published in memoriam to Dr M. S. Kharasch first United States editor of *Tetrahedron* the international journal of organic chemistry. London, [etc.], Los Angeles, Pergamon P., 1959. x,251pp., tables, diagrs., bibliog. 75*s*. or $12.50. *International series of monographs on organic chemistry, ed. by D. H. R. Barton and W. Doering; vol. 1.*

Supplement no. 3 to *Tetrahedron*. Short biography, scientific assessment, bibliography, and papers of Kharasch followed by nine authoritative articles. *B*

548 Mineralogical sciences

BUERGER, M. J. 655
Vector space and its application in crystal-structure investigation. N.Y., Wiley; London, C & H. 1959. 347pp. $12 or 96*s*. *B*

55 GEOLOGY

AHRENS, L. H. *and others, eds* 656
Physics and chemistry of the Earth; vol. 3, ed. by L. H. Ahrens, F. Press, K. Rankama, and S. K. Runcorn. N.Y., London, [etc.], Pergamon P., 1959. viii, 464pp., tables, diagrs. $15 or 100*s*. *Progress series.*
Authoritative work describing some recent research in topics selected from a broad cross-section of geophysics and geochemistry. *C*

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Ground water hydrology. N.Y., Wiley; London, C & H, 1959. xii,336pp., illus., plate, tables, diagrs., bibliog. $10.75 or 86*s*. *B*

VINOGRADOV, A. P. 658
The geochemistry of rare and dispersed chemical elements in soils; tr. from the Russian. 2nd ed., rev. and enl. N.Y., Consultants' Bureau; London, C & H, [U.S. 1959]. [2],209pp., tables, diagrs. $9.50 or 80*s*.
Originally published Moscow, 1957. *C*

57 BIOLOGY

BAYLISS, L. E. 659
Principles of general physiology; vol. 1, the physio-chemical background. 5th ed. Longmans Green, 1959. xiv,520pp , illus., tables, diagrs., bibliog. 55*s*.
First ed. 1915. Completely revised. Covers the physical chemistry which makes up the essential background for modern physiology. Treatment is always rigorous but lucid and logical in its presentation. *B–C*

INTERNATIONAL CONGRESS FOR MICROBIOLOGY 660
Recent progress in microbiology: symposia held at the seventh International Congress for microbiology, Stockholm, 1958; with an addendum (in English and French) on the structure and function of I.A.M.S., comp. by C. G. Hedén, ed. by G. Tunevall. Oxford, Blackwell Scientific Publs, 1959. 453pp., illus., tables, diagrs., bibliog. 70*s*.
Valuable survey of important fields of microbiological investigation. *C*

STENNING, D. J. 661
Savannah nomads: a study of the Wodaabe pastoral Fulani of Western Bornu Province, Northern Region, Nigeria; foreword by Daryll Forde. OUP for the International African Institute, 1959. xv,266pp., illus., plates, tables, diagrs., bibliog. 40*s*. *B*

577.1 Biochemistry

HARRISON, K. 662
A guide-book to biochemistry. Cambridge, CUP, 1959. viii,150pp., diagrs. 17*s*. 6*d*. (paper 10*s*. 6*d*.).
Brief but informative first introduction for students. Almost the whole range of the subject is covered, certain researches being selected for brief discussion. *B*

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Behaviour of enzyme systems: an analysis of kinetics and mechanism. Minneapolis, Burgess, 1959. xii,317pp., diagrs., bibliog. $6.50.
Discussion of kinetic questions and graphs observable in the study of enzyme reactions and their relation to mechanism. Little mathematical knowledge is required. Should be useful to biochemists and chemists. *B*

58 BOTANY

DAUBENMIRE, R. F. 664
Plants and environment: a textbook of plant autecology. 2nd ed. N.Y., Wiley, 1959. 422pp., illus. $6.95.
Includes new material on atmospheric pollution, urban microclimate, and the significance of dews for plants. *B–C*

HITCHCOCK, C. L. *and others, eds* 665
Vascular plants of the Pacific Northwest; part 4, Ericaceae through Campanulaceae; ill. by J. R. Janish. Seattle, University of Washington P., 1959. 516pp., illus. $12. *Washington University publications in biology; vol. 17.* *C*

STEVEN, H. M. *and* CARLISLE, A. 666
The native pinewoods of Scotland. O & B, 1959. xvi,368pp., illus., plates, tables, diagrs., bibliog.
Discusses these woodlands, often called the Caledonian Forest, from historical, ecological, and forestry points of view. *C*

6 APPLIED SCIENCES

HUBERTY, M. R. *and* FLOCK, W. L., *eds* 667
Natural resources. N.Y., [etc.], London, McG-H, 1959. xviii,556pp., illus., plate, tables, diagrs., bibliog. $11 or 85*s.* 6*d.* *California University. Engineering extension series.*
Contains a series of lectures by eminent professors covering application of technology in various sciences. *B–C*

61 MEDICAL SCIENCES

ANDREW, W. 668
Textbook of comparative histology. N.Y., [London], OUP, 1959. xx,652pp., illus., diagrs. $15 or 120*s.* *B*

SANDOSHAM, A. A. 669
Malariology, with a special reference to Malaya. Singapore, Malaya U.P.; London, OUP, 1959. xix,327pp., illus., plates, tables, diagrs., bibliog. 35*s.*
Written as a teaching manual for public health students. *B*

62 ENGINEERING

HODGE, P. G. 670
Plastic analysis of structures. N.Y., [etc.], London, McG-H, 1959. 364pp., illus. $10.50 or 81*s.* 6*d.*
Textbook starting at elementary level and dealing with both techniques of plastic design and application of methods. *B*

621 Mechanical engineering

621.4 Internal combustion and heat engines

SMITH, D. H. 671
The modern diesel: automotive oil engines for transport, marine, and industrial use. 13th ed. London, Iliffe; Philadelphia, Chilton, 1959. x,288,A-9pp., illus., tables, diagrs. 17*s.* 6*d.*
First published 1932. Handbook giving detailed information on modern diesel engines used for road transport. *A*

629 Transport engineering

629.13 Aeronautical engineering

EVRARD, E., *and others, eds* 672
Medical aspects of flight safety (the unexplained aircraft accident); ed. by E. Evrard, P. Bergeret, and P. M. Van Wulfften Palthe. Pergamon P. for Advisory Group for Aeronautical Research and Development, NATO, 1959. ix,308pp., illus., plates, tables, diagrs., bibliog. 80*s.* *C*

HARVEY, D. 673
The Comet, with a foreword by R. E. Bishop. Cassell, 1959. xvi,110pp., illus., tables, diagrs. 10*s*. 6*d*. *Famous airliners*.
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The Douglas airliner story well told and illustrated. *A and D*

629.19 Astronautics

HOBBS, M. 675
Basics of missile guidance and space techniques; vols 1 and 2. N.Y., Rider, 1959. viii,144;vi,146pp., diagrs. 2v. $3.90 each.
Primer of electronic and mechanical methods for the guidance and control of rocket-propelled vehicles. *A*

63 AGRICULTURE

MARSHALL, T. J. 676
Relations between water and soil. Farnham Royal (Bucks.), Commonwealth Agricultural Bureaux, 1959. viii,91pp., tables, diagrs., bibliog. 20*s*. *Commonwealth Bureau of Soils, technical communication no. 50*.
Mainly concerned with the agricultural use of soils but also refers to the related work of clay and petroleum technologists. Useful bibliography of some 340 items. *C*

65 COMMERCE. ORGANIZATION. COMMUNICATIONS

656 Transport

NICHOLLS, A. E. 677
Seamanship and nautical knowledge for second mates', mates', and masters' examinations. 21st ed., by C. H. Brown, rev. by H. H. Brown. Glasgow, Brown, Son & Ferguson, 1959. [25],658pp., illus., plates, diagrs. 36*s*.
Previous ed. 1953. A well-written and simply explained textbook for both professional and amateur. Contains the latest matter on radio aids to navigation. *A–B*

657 Accountancy

SUTTON, O. 678
Machine accounting; 3rd ed. completely rev. and enl. with new material by L. M. Nation-Tellery. Macdonald & Evans, 1959. xiv,278pp., illus., diagrs. 42*s*.
Practical guide to the use of the most modern machinery in business accountancy. The 1945 edition has been largely rewritten and brought up to date. *B*

66 CHEMICAL TECHNOLOGY

BELL, H. S. 679
American petroleum refining. 4th ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. x,538pp., illus., tables, diagrs., bibliog. $12.50 or 94*s*.
Up-to-date guide to petroleum refining, giving data on all processes and including some theoretical considerations. Many diagrams and flow-charts. *B*

POUCHER, W. A. 680
Perfumes, cosmetics, and soaps: with special reference to synthesis; vol. 1 being a dictionary of raw materials together with an account of the nomenclature of synthetics. 6th ed. C & H, 1959. xvi,463pp., plates, tables, diagrs. 75*s*.
First published 1923. Fully revised and brought up to date. Standard reference work giving brief abstracts of methods of preparation with notes on use of the materials. *D*

67/68 MANUFACTURES

681 Precision mechanisms

BURSTEIN, H. 681
Stereo: how it works. N.Y., Gernsback Library; [London, Modern Book], 1959. 224pp., illus., diagrs. $2.90 or 40*s*. cloth; 23*s*. paper.

Handbook on the problems of production and use of stereo on disc and tape, including microphone techniques, amplifiers, and speakers; illustrated with many diagrams and including an index. *A–B*

IEVESON, J. H. *ed.* 682
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Recommended to managers and accountants rather than to technologists. *A*

69 BUILDING

BEEDLE, L. S. 683
Plastic design of steel frames. N.Y., Wiley, 1958; London, C & H, 1959. xiv, 406pp. $13 or 104*s*.

Covers plastic theory and methods of analysis, secondary design problems such as the influence of axial and shear forces, requirements for connections, deflections, and the design of continuous beams and steel frames. *C*

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Introduction to the subject which surveys the principles, fuels, appliances, equipment, and systems used. Brief notes are given on new developments. *B*

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7 FINE ARTS

72 ARCHITECTURE

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Habitation: programme, design, production. Amsterdam, London, [etc.], Elsevier for Bouwcentrum, Rotterdam, at the request of the International Union of Architects (I.U.A.), 1959. 234pp., illus., tables, diagrs. 50 *fl.* or 95*s*. *International documentation series 2.*

Second of three volumes reviewing good recent housing in many countries, including the U.K. *C*

77 PHOTOGRAPHY

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The technique of film animation. London, N.Y., Focal P., 1959. 348pp., illus., diagrs., bibliog. 42*s*. or $10. *B*

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B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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Economic fluctuations in England, 1700–1800. Oxford, Clarendon P., 1959. viii,199pp., tables. 21*s.*
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331 Industrial relations

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37 EDUCATION

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Broadcasting with children: broadcasting techniques as an aid to teaching. ULP, [1959]. 128pp., diagrs. 9*s.* 6*d.* *B*

ROWE, A. B. 697
The education of the average child. Harrap, 1959. 255pp., illus., diagrs. 15*s.*
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5 NATURAL SCIENCES

51 MATHEMATICS

IRVING, J. *and* MULLINEUX, N. 698
Mathematics in physics and engineering. N.Y., London, Academic P., 1959. xvii,883pp., tables, diagrs., bibliogs. $11 or 63*s*. *Pure and applied physics, vol. 6.*
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Introduction to elementary algebra by an assistant professor of mathematics at Oklahoma State University; with numerous examples. *B*

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Atlas of γ-ray spectra from radiative capture of thermal neutrons, by L. V. Groshev, A. M. Demidov, V. N. Lutsenko, V. I. Pelekhov; tr. from the Russian by J. B. Sykes. London, [etc.], Los Angeles, Pergamon P., 1959. 198pp., tables, diagrs. 140*s*. or $20. *International series of monographs on nuclear energy.*
Collection of data on gamma-ray spectra, gamma-line energies and intensities, and nuclear energy levels resulting from thermal neutron capture by over fifty elements. Includes all information published up to January 1958. *C*

HAYES, W. D. *and* PROBSTEIN, R. F. 706
Hypersonic flow theory. N.Y., London, Academic P., 1959. xiv,464pp., tables, diagrs. $11.50 or 82*s*. *Johns Hopkins University applied physics laboratory, applied mathematics and mechanics, vol. 5.* *C*

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Volume 7 of the author's course, containing a number of topics not usually found in textbooks on the subject. For advanced physicists. *C*

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Comprehensive treatise of particular interest to graduates wishing to specialize in the subject. *C*

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711
SOLID state physics: advances in research and applications; vol. 8, ed. by F. Seitz, D. Turnbull. N.Y., London, Academic P., 1959. xiv,519pp., illus., tables, diagrs., bibliog. $13.50 or 96*s*. 6*d*.
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539.1 Nuclear physics

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Atomic age physics. N.Y., Reinhart; [London, C & H], 1959. x,230pp., illus., tables, diagrs. $2 or 16*s*.

Account of atomic and nuclear physics up to most recent advances, using simple language, little mathematics, and clear illustrations. The authors are experienced teachers. *A*

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Definitive account of the group theory of spherically symmetric quantum systems, carefully revised to conform with current sign conventions. Its main modern applications are in atomic and nuclear shell theory. *C*

54 CHEMISTRY

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Organic sequestering agents: a discussion of the chemical behaviour and applications of metal chelate compounds in aqueous systems. N.Y., Wiley; London, C & H, 1959. xvi,616pp., illus., tables, diagrs. $25 or 200*s*.

Authoritative and well-documented review of the chemical behaviour and applications of organic sequestering agents. For research workers and others using such compounds in industrial and other applications. *C*

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Steroids. N.Y., Reinhold; London, C & H, 1959. xviii,945pp., tables, diagrs. $18 or 144*s*.

Comprehensive up-to-date text which presents the full range of steroid chemistry in readable and instructive manner. Will appeal to organic chemists, especially those working in the field described. *B–C*

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Previous ed. 1942. *B*

ROCHLIN, R. S. *and* SCHULTZ, W. W. 720
Radioisotopes for industry. N.Y., Reinhold; London, C & H, [1959]. ix,190pp., illus., tables, diagrs., bibliog. $4.75 or 38*s*. *Pilot books.*

Ways in which radioisotopes can be used in industry. For industrial engineers and plant managers. *A–B*

SEMENOV, N. N. 721
Some problems of chemical kinetics and reactivity; vol. 2; tr. [from the Russian] by J. E. S. Bradley. London, [etc.], Los Angeles, Pergamon P., 1959. x,168pp., tables, diagrs. 35*s*. or $5.

Brief theoretical treatment of selected topics; covering branched chain reactions and ignition reactions including phosphorus-oxygen and hydrogen-oxygen reactions and both gas and liquid phase degenerate branched chain reactions. *B–C*

TUCKER, S. H. 722
An electronic outline of organic chemistry. ULP, 1959. xvi,478pp., tables, diagrs. 63*s*.

Deals with the mechanisms of a large number of classical organic reactions in terms of electronic theory. For honours degree chemistry students. *B*

55 GEOLOGY

551.5 Meteorology

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Recent advances in atmospheric electricity: proceedings of the second conference on atmospheric electricity held at Portsmouth, New Hampshire, May 20–23, 1958. London, [etc.], Los Angeles, Pergamon P., 1959. xv,631pp., illus., tables, diagrs., bibliog. 120*s.* or $17.50.

Describes current experimental and theoretical investigations. For meteorologists and geophysicists, and electrical and communication engineers working in certain fields. *C*

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British weather in maps. N.Y., St Martin's P.; London, Macmillan, 1958. 256pp. $5 or 21*s.* *B*

57 BIOLOGY

725
PROCEEDINGS of the International Congress of Radiation Research, Burlington, Vermont, U.S.A., August 11–15, 1958, ed. by D. E. Smith. N.Y., [London], Academic P., 1959. xvi,582pp., illus., tables, diagrs., bibliog. 52*s.* *Radiation research, supplements no. 1.*

Covers wide range of topics from radiation chemistry and basic processes and methods used in radiation research to radiobiology. Special sections on oxygen and hydrogen peroxide, and on changes in DNA and chromosome structure. *B–C*

SOCIETY FOR THE STUDY OF DEVELOPMENT AND GROWTH 726
Cell, organism and milieu [17th symposium of the Society]; ed. by D. Rudnick. N.Y., Ronald P., 1959. 326pp., illus. $8. *C*

59 ZOOLOGY

HYMAN, L. H. 727
The invertebrates; vol. 5: smaller coelomate groups: chaetognatha, hemichordata, pogonophora, phoronida, ectoprocta, brachipoda, sipunculida, the coelomate bilateria. N.Y., [etc.], London, McG-H, 1959. viii,783pp., illus., bibliog. $14.50 or 104*s.* 6*d.* *C*

MATTINGLY, P. F. 728
The culicine mosquitoes of the Indomalayan area; part 4: genus aedes meigen, subgenera skusea theobald, diceromyia theobald, geoskusea edwards and christophersiomyia barraud. British Museum (Natural History), 1959. 61pp., illus., diagrs., bibliog. 12*s.* *C*

6 APPLIED SCIENCES

61 MEDICAL SCIENCES

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Principles of radiation dosimetry. N.Y., Wiley; London, C & H, 1959. 124pp., illus., bibliog. $7 or 56*s.*

Examples taken mainly from biological and medical dosimetry, but text applies equally to analogous problems in physics and chemistry. *B*

62 ENGINEERING

621 Mechanical engineering

AMERICAN VACUUM SOCIETY 731
1958 fifth national symposium on vacuum technology: transactions; October 22, 23 and 24. Hotel Sir Francis Drake, San Francisco, California. London, [etc.], Los Angeles, Pergamon P., 1959, 282pp., illus., tables, diagrs. $15 or 100*s*.
Contains papers by experts from many countries on various aspects of the technique. *B*

MURPHY, G. J. 732
Control engineering. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. xii,386pp., tables, diagrs., bibliogs. $7.50 or 56*s*. *Series in electronics and communications, ed. by H. J. Reich.*
Presents an up-to-date coverage at a level between general introduction and exhaustive treatment. Problems and illustrations are drawn from many fields. *B*

621.7 Workshop practice

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Exploring patternmaking and foundry. Princeton (N.J.), [etc.], London, Van Nostrand, 1959. xiv,206pp., illus., tables, diagrs. $4.85 or 36*s*.
For first-year foundry students or apprentices; gives an outline of the fundamental principles in patternmaking and moulding. *B*

624 Civil engineering

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Advanced structural design. Batsford, 1959. xiv,329pp., tables, diagrs. 50*s*.
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Energy principles in applied statics. Blackie, 1959. viii,112pp., tables, diagrs., bibliog. 25*s*.
Considers explicitly the approaches to the analysis of static systems, with descriptive examples. *C*

FABER, O. 736
Reinforced concrete simply explained. 5th ed., rev. by J. Faber. OUP, 1959. xii,88pp., tables, diagrs. 12*s*. 6*d*.
Compact and clear textbook with fully worked examples; for beginners. *B*

MATHESON, J. A. L. 737
Hyperstatic structures: an introduction to the theory of statically indeterminate structures, with chapters by N. W. Murray and R. K. Livesley; vol. 1. Butterworths, 1959. xvi,474pp., tables, diagrs., bibliogs. 90*s*.
Familiar methods of analysis are explored and compared. Comprehensive, well-referenced book for students and practising graduate engineers. *B*

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Philosophy of structures; English version by J. J. Polivka and M. Polivka. Berkeley, University of California P., 1958; Cambridge, CUP, 1959. 366pp., illus. $12.50 or 94*s*.
Deals with all forms of structure for which civil and structural engineers are responsible, giving methods of construction and erection, aesthetics, calculations, organization, and the qualities required in the designer. *C*

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Comprehensive illustrated account of railway engineering, operation, and management, enabling the non-technical reader to gain a clear understanding of the problems involved. *A*

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The concise encyclopaedia of world railway locomotives. Hutchinson, 1959. 512pp., illus., tables, diagrs., bibliog. 50*s*. *New horizon books*.
Reference book for technologists and railway enthusiasts, prepared by a well-qualified team. *A and D*

627 Natural water channels

CORNICK, H. F. 741
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The world's lighthouses before 1820. London, N.Y., Toronto, OUP, 1959. xxiv,310pp., illus., tables, diagrs. 63*s*.
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A & U	Allen & Unwin
B & S	Bailey & Swinfen
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
R & KP	Routledge & Kegan Paul
ULP	University of London Press

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